The Subsistence Harvest of Harbor Seal and Sea Lion by Alaska Natives in 1995

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Cover, A hunter's hat with sea lion whiskers, Kodiak Island (Alutiiq). The hat is of woven spruce root, with a design painted with blue, green, red, and black pigments. It is embellished with sea lion whiskers, dentalium shells, trade beads, and fabrics. Collected in 1884. Photo courtesy Smithsonian Institution, National Museum of Natural History, Cat. No. 74720.

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ABSTRACT

This report describes the subsistence takes of harbor seal (*Phoca vitulina*) and Steller sea lion (Eumetopias jubatus) by Alaska Natives in 1995, including quantity, seasons, geographic distribution, and age and sex of the harvest. Information is summarized at the state, region, and community levels, and is compared with takes during 1992-94. The research was conducted by the Division of Subsistence, Alaska Department of Fish and Game under contract with the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service. Information derives from systematic interviews with hunters and users of marine mammals in 1,886 households in 58 coastal communities within the geographic ranges of the two species. Local researchers conducted most of the household interviews as part of a local and regional research network. The project received generous support from leaders of a number of Native governments, regional, and statewide associations.

During 1995, the estimated subsistence take of harbor seal by Alaska Natives was 2,742 seals, with a 95 percent confidence range of between 2,184 to 3,679 seals. Of the take, 8.9 percent (243 seals) were stuck and lost and 91 .1 percent (2,498 seals) were harvested. Harbor seals were taken in 50 of 58 surveyed communities. The 1995 take of harbor seals (2,742 seals) was the second highest take estimate to date of the four survey years -- 2,854 seals (1992), 2,736 seals (1993), and 2,621 seals (1994).

During 1995, the estimated subsistence take of sea lions by Alaska Natives was 339 sea lions, with a 95 percent confidence range of between 258 to 465 sea lions. Of the take, 9.5 percent (32 sea lions) were struck and lost and 90.5 percent (307 sea lions) were harvested. Sea lions were taken in 17 of 58 surveyed communities. The 1995 take of sea lions (339 animals) was the lowest recorded of the four survey years -- 549 sea lions (1992), 487 sea lions (1993), and 416 sea lions (1994).

For harbor seals, hunters reported taking males over females by about two to one, and adults (84 percent) over juveniles (15 percent) or pups (1 percent). For sea lions, hunters reported taking males over females by about two to one, and juveniles (67 percent) over adults (33 percent) or pups (0 percent). Regional differences in the ages of harbor seal harvests are discussed as possible indices of population structures. Struck and lost rates were the lowest reported to date for both species. In addition to detailed quantitative harvest breakdowns by community, the report describes contemporary subsistence food products prepared from seals and sea lions.

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This project would not have been possible without tremendous local support in every community where we conducted the survey. We wish to thank each tribal council, city council, and all of the regional Native organizations who facilitated our work. Carl M. Hild and Carl Jack of **RurAL** CAP assisted us in this effort and merit special mention, along with members of the Indigenous People's Council for Marine Mammals who reviewed the survey instruments and preliminary survey findings. Charles Smythe of the Smithsonian Institution, Museum of National History, located the photograph of the Kodiak Island hunter's hat for the cover illustration. Jonathan Lewis and Donald Calkins of ADF&G provided helpful comments concerning possible interpretations of age composition data. Heartfelt thanks are owed to the many elders and local marine mammal experts who allowed us to interview them at length about their lifelong use and observations of sea lions and harbor seals. In addition, we are deeply indebted to the many hundreds of hunters who volunteered to report their subsistence harvests to our staff and to locally hired research assistants.

The sixty-two local researchers who conducted household interviews deserve to be recognized individually for their high level of interest and work. We look forward to working with many again in the near future as the project moves into its fifth year:

Mitchell Simeonoff, Akhiok Ben Darling, Akutan Frank Chythlook, Aleknagik Daniel Chythlook, Aleknagik Alice Green, Anchorage, Nanwalek Harriet Silva, Angoon
Ray Golodoff, Atka
Moses Dirks, Atka (USF&WS) Mike Eleshansky, Chenega Bay Polly Aleck, Chignik Bay Rhonda Gregorio, Chignik Lagoon Mitchell Lind, Chignik Lake Thomas Gardiner, Clark's Point Henry Wasilly, Clark's Point Bud Janson, Jr., Cordova Monica Riedel, Cordova Fred Hamilton, Craig Sally Krause, Dillingham Roy White, Égegik Gilda Shellikoff, False Pass Jessie Grant, Haines Phyllis Snively, Hoonah Karen Williams, Hoonah Frank **Alby**, Hydaburg Karen Kalmakoff, Ivanof Bay Carrie Cruise, Juneau Stuart D'Cafango, Juneau Veronica Loges, Kake Alicia Lynn Reft, Karluk Gina **Demmert**, Ketchikan Gerald Hope, Ketchikan

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Floyd Wilson, King Salmon
Marvin George, Klawock
Donald Hotch Sr., Klukwan
Sheila Theriault, Larsen Bay
Alex Tallekpalek, Levelock
Bessie Toyukak, Manokotak
Floyd Wilson, Naknek and King Salmon
George Inga Sr., Old Harbor
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Marie Mork, Pelican
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Vincent Komok, Seward
Vickie Bartels, Sitka
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Nena Fuller, South Naknek
Loretta Stellwag, Tatitlek
Nora Flores, Togiak
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INTRODUCTION

This report describes the subsistence takes of harbor seal (*Phoca vitulina*) and Steller sea lion (*Eumetopias* jubatus) by Alaska Natives in 1995. The report is the fourth of a five-year subsistence study of harbor seal and sea lion in Alaska. Findings for the first three study years were reported in Wolfe and Mishler (1993, 1994, 1995). The research was conducted by the Division of Subsistence of the Alaska Department of Fish and Game under contract with the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service. The study was conducted in. cooperation with the Indigenous People's Council for Marine Mammals and the Rural Alaska Community Action Program, organizations representing Alaska Native marine mammal hunters.

The report provides information on the subsistence takes of harbor seal and sea lion during 1995, including size, seasons, geographic distributions, and age and sex of harvested animals. Information on subsistence uses derives from systematic interviews with marine mammal hunters in 58 communities (Fig. 1, Table 2). Information was collected principally by local researchers trained in each community, working within a network of local and regional researchers organized by the Division of Subsistence.

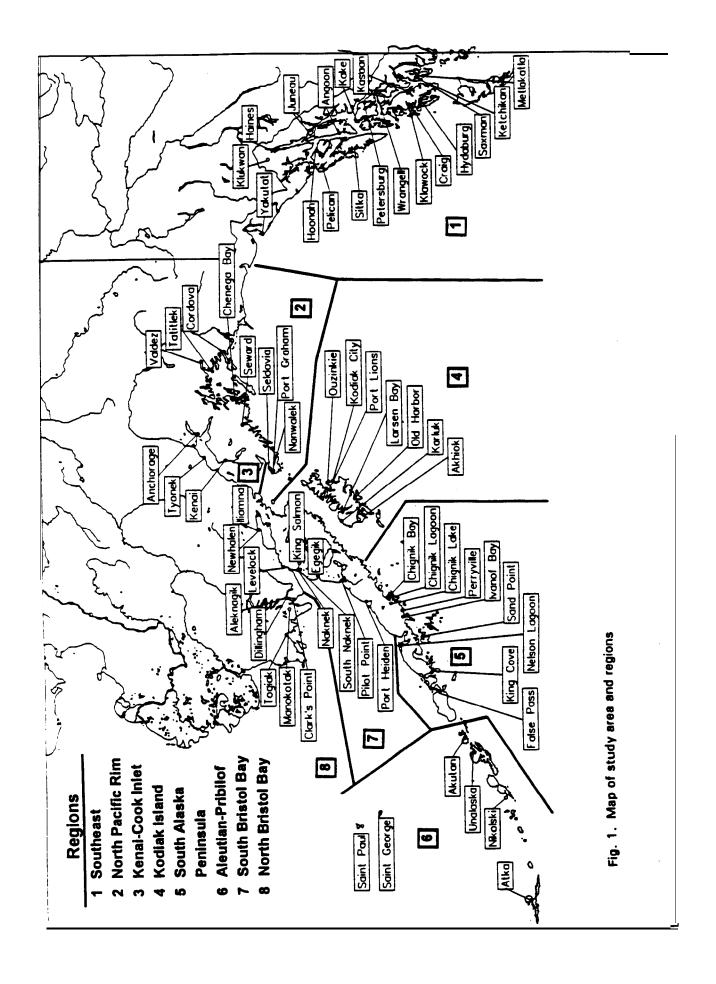
The geographic area covered by this report was defined as the Alaska coastal waters south of Cape Newenham, including the Pribilof Islands, which corresponds with the general distributions of harbor seal and sea lion in Alaska (Figs. 2 and 3, from Bums, Frost, and Lowry 1985). The use of harbor seal and sea lion by Alaska Natives for food and raw materials has a long tradition in this part of Alaska, since before historic contact through to the present. The Alaska Native groups using harbor seal include the Aleut of the Aleutian Islands, the Alutiiq and Eyak of the Pacific Gulf coast, the Dena'ina of Cook Inlet, the Tlingit, Haida, and Tsimshian of the southeast archipelago, and the Yup'ik of southwest Alaska. The Aleut of the Aleutian and Pribilof

islands and the Alutiiq of certain communities of Kodiak Island and the Gulf of Alaska currently are the primary users of sea lion. Sea lion are used more occasionally by Tlingit, Haida, Tsimshian, and Yup'ik groups. Subsistence products derived from harbor seal and sea lion by Alaska Natives include oil, meat, and skins, as described in Wolfe and Mishler (1993).

The report is organized in several sections. The <u>Methodology</u> section describes the methods used to collect information. Two sections (<u>The Subsistence Take of Harbor Seal in 1995</u> and <u>The Subsistence Take of Sea Lion in 1995</u>) present information on the statewide takes of harbor seal and sea lion, summarized by community and region. Some contemporary methods used by Alutiiq families to prepare selected subsistence products from sea lions and harbor seals are described in the section, <u>Alutiia Cookino of Sea Lion and Harbor Seal</u>. In the <u>Discussion</u> section are interpretations of the 1995 survey year, including comparisons with other years. <u>Appendix A</u> contains a copy of the survey instrument used in household interviews with marine mammal hunters. <u>Appendix B</u> contains regional summaries of the subsistence takes of harbor seal and seal lion. <u>Appendix C</u> contains materials on the subsistence takes of harbor seal and sea lion by community.

METHODOLOGY

Information on the subsistence takes of harbor seal and sea lion in 1995 was collected through interviews with persons in 1,886 Alaska Native households in 58 coastal communities (Table 2). Respondents were asked to recall information about their household's use of these marine mammals during the previous year. The survey instrument administered in household interviews was similar to one used 1992-1994, first developed in consultation with the Rural Alaska Community Action Program (RurAL CAP) and the Indigenous People's Council for Marine Mammals (IPCoMM) (see



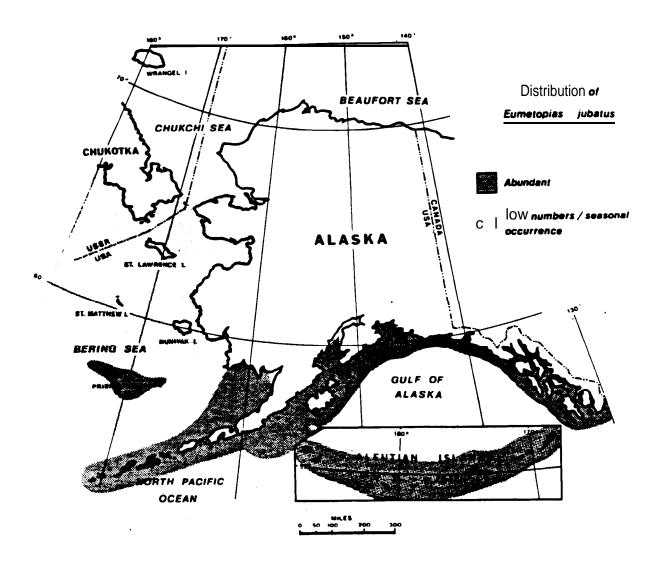


Fig. 2. General distribution of sea lion in Alaska. (Source: Burns, Frost, and Lowry 1985)

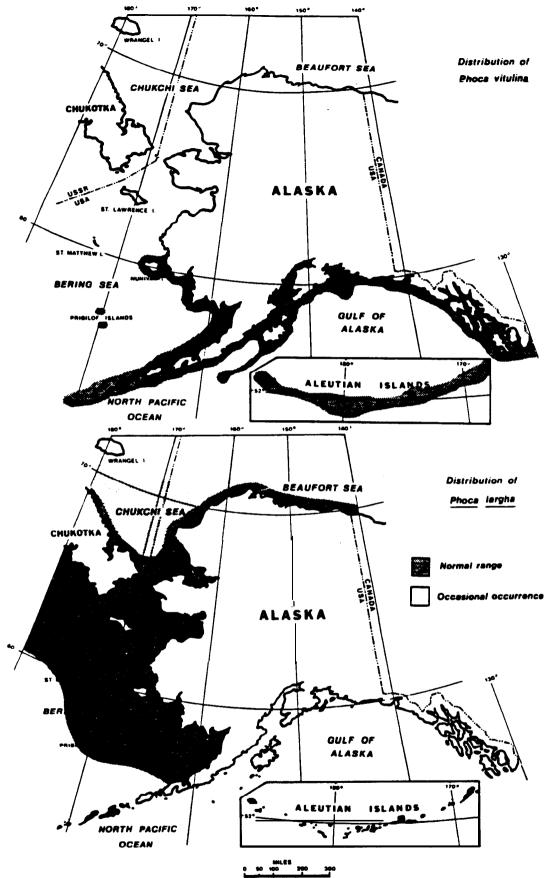


Fig. 3. [Top] General distribution of harbor seal (Phoca vitulina) in Alaska. [Bottom] General distribution of spotted seal (Phoca largha) in Alaska. (Source: Burns, Frost, and Lowry 1985)

Appendix A). Hunters and household heads were asked to recall the number of sea lions and harbor seals taken by household members during each month over the past year. The survey contained questions that pertained to harvest numbers, struck and lost animals, age of animals, and sex of animals. The survey also asked whether the household used, harvested, received, or gave away sea lion or harbor seal during the last year. Interviews were conducted by local researchers hired and trained as part of the project, augmented by regional Division of Subsistence researchers in select communities. Surveys were conducted in two rounds. The first survey was administered in May 1995 to cover the period from January through April 1995. The second survey was administered in January 1996 to cover the period from May through December 1995.

The project was designed to be a collaborative effort with Alaska Native hunters and organizations. During the first year of the study, a number of Native governments, Native leaders, and associations with interests in harbor seal and sea lion management were contacted. to obtain suggestions about project design, including the Alaska Federation of Natives; the Aleutians Ea'st Borough; Aleutian-Pribilof Islands Association; Bristol Bay Native Association; Central Council of Tlingit and Haida Indian Tribes of Alaska; Cook Inlet Region, Inc.; IPCoMM (meeting through RurAL CAP); Kodiak Area Native Association; and the North Pacific Rim (Chugachmiut). RurAL CAP and IPCoMM were asked to be the formal technical oversight organizations for the project, through a subcontract with the Division of Subsistence. Each year, they review the project, data analysis, and preliminary findings of the study.

Following standard procedures of the Division of Subsistence, support for the project was solicited from local Native governments, or by leaders of local government entities, for each community where surveys were conducted (see Fall 1990). During the first project year, contacts were made with representatives of all the entities listed in Table 1, and the project received support in the communities listed in Table 2. Many

local governments have been extremely helpful during the course of the project, especially by identifying Native households, potential local researchers, and marine mammal experts in the community to contact.

The project was designed to protect the identities of surveyed participants. Marine mammal hunters and other respondents were informed that participation in interviews was completely voluntary. Respondents were told that their identities would be kept confidential in reports presenting the information. **Permission** to administer the household harvest survey was asked of each individual respondent, face-to-face at the person's home or during an initial phone contact. At this time, the purpose of the project was described. If a person declined to participate in the study, the person was thanked for his or her time and a survey was not, conducted. Persons who were interviewed as part of the harvest survey were not paid. Most marine mammal hunters generously offered their assistance to the study.

As stated above, a research network using locally-hired researchers and regional Division of Subsistence researchers was used to collect information on subsistence takes of sea lion and harbor seal during 1995. This type of research organization was developed by the Division of Subsistence during the first study year, and fully implemented by the second study year. In each of the 58 communities selected for surveys, one or two local residents were hired as local researchers. Newly hired local researchers received in-person training from regional researchers, whereas local researchers who successfully conducted surveys on previous rounds usually worked with regional researchers through telephone, fax, and the mail. Local researchers performed tasks such as updating community lists of households and hunters, implementing household sampling regimes, administering household surveys twice during the yearly cycle, data proofing of surveys and survey tracking forms, and mailing surveys and tracking sheets for data entry and analysis. Regional researchers performed tasks such as obtaining formal support for the project from Native

TABLE 1. ORGANIZATIONS CONTACTED DURING THE PROJECT

Community	Government/Organization
	Contacted
Akhiok	Akhiok Tribal Council
	City of Akhiok
Akutan	Akutan Traditional Village Council
	City of Akutan Akutan Corporation
Aleknagik	Aleknagik Tribal Council
Anchorage	Cook Injet Tribel Council
	Alaska Federation of Natives
Angoon	City of Angoon
Atka	Atka IRA Council
	City of Atka
Chenega Bay	Chenega Bay IRA Council
Chignik Bay	Chignik Bay Traditional Village Council
Chignik	Chignik Lagoon Traditional Village
Lagoon Chissila I slee	Council
Chignik Lake Clark's Point	Chignik Lake Traditional Village Council Clark's Point Traditional Council
Cordova	Traditional Village of Eyak
Craig	Shaan-Seet, Inc.
U. 319	City of Craig
Dillingham	Dillingham Traditional Council
Egegik	Egegik Traditional Council
False Pau	False Pass Tribal Council
	Cii of False Pass
Haines	Chilkat Indian Association
Hoonah	Hoonah Traditional Council
Hydaburg	HaidaCorporation
•	City of Hydaburg
Hiamna	Iliamna Village Council
Ivanof Bay Juneau	Ivanof Bay traditional Village Council Tlingit and Haida Central Council
Juneau	Tiingit and Haida Centrai Councii Sealaska
	Auke Tribe Council
	Alaska Native Brotherhood/Sisterhood
Kake	Organized Village of Kake
	City of Kake
Karluk	Karluk IRA Council
Kenai	Kenaitze Indian Tribe IRA
17 (1 ")	Cook Inlet Region, Inc.
Ketchikan	Ketchikan IRA Council
Ving Cove	Ketchikan Indian Corporation Agdaagux Tribe of King Cow
King Cove	Aggaagux i ribe of King Cow BelofskyVillage Coundi
	City of King Cove
King Salmon	King Salmon Tmdiinal Council
Klawock	Klawock Cooperative Association
	Klawock Haanya copomtion
Klukwan	Chilkat Indian Village
Kodiak City	KodiakTribal Council
	Kodiak Area Native Association
Larsen Bay	Larsen Bay Tribal Council
	City of Larsen Bay
Levelock	Levelock Traditional Council

Community	Government/Organization
1	Contacted
Manokotak	Manokotak Tmditional Council
Metiakatia	Council Annette Islands Reserve
Naknek	Metiskatia Indiin Community Naknek Traditional Council
Nanwaiek	Narwalek Traditional Council
11EIIWEIEK	English Bay Corporation
Nelson	Nelson Lagoon Village Council
Lagoon	
Newhalen	Newhalen Tmditional Council
Nikokski	Nikolski IRA Council
	Chaluka Corporation
Old Harbor	Old Harbor Tribal Council
	City of Old Harbor
Ouzinkie	Ouzinkie Native Corporation Ouzinkie Tribal Council
	Cii of Ouzinkie
Pelican	Tlingit and Heide Indians of Pelicen
	Community Council
:	City of Pelican
Perryville	Perryville Traditional Village Council
Petersburg	Petersburg Indian Association
Pilot Point	Pilot Point Traditional Council
Port Graham	Port Graham Village Council
	Port Graham Corporation
Port Heiden	Port Heiden Tmdiional Council
Port Lions	Port Lion8 Tribal Council
0-1-1-0	City of Port Lion8 Saint George Traditional IRA Council
Saint George	Saint George Traditional IRA Council Saint George Tanag Corporation
	City of Saint George .
Saint Paul	Tribal Government of Saint Paul
	City of Saint Paul
Send Point	Unga Tribal Council
	Qagan Tayagugin Tribe of Sand Point
	City of Sand Point
Saxman	Sexman IRA Council
Seldovia	City of Saxman Seldovia Native Association
Seward	Qutekcak Native Association
Sitica	Alaska Native Brotherhood
I	Sitka Tribal Council
South Naknek	South Naknek Traditional Council
Tatitlek	Tatitiek iRA Councii
Togiak	Togiak Traditional Council
Tyonek	Native Village of Tyonek
Unaleska	Quawalangin Tribal Council
Valdez	Valdez Native Association
Wrangell	Wrangell Cooperative Association
Yakutat	Yakutat Alaska Native
	Brotherhood/Alaska Native Sisterhood Yakutat Native Association
	Yak-Tat Kwaan
	Law-ter Umeen

organizations, recruiting and selecting local hires, developing household sampling regimes, training and supervising local researchers, proofing survey data, consulting local researchers to resolve data questions in preparation for data entry and analysis, writing reports on each community's survey experience, and entering fieldnotes into a centralized database. Data analysis was performed by Division of Subsistence data management staff.

During the fourth survey year, the number of surveyed communities dropped to 58 places (from 59 in 1994) because of the loss of Nikolski as a sampling unit. In the 1995-96 survey year, a local surveyor could not be secured in Nikolski. The project decided not to send a regional researcher to Nikolski to collect the information, given the small harvest of marine mammals documented in previous years relative to the cost of a regional researcher conducting the survey in the distant Aleutian Island community.

Households were selected using three main designs, depending upon the community -- census sampling, two-strata random sampling, and chain referral sampling. The type of design used for each community is shown in Table 2. Sampling designs and expansion methods were similar to those used the first study year, as described in Wolfe and Mishler (1993:17-19). For communities with census or chain referral sampling, 85.3 percent of identified households (1,131 of 1,326 households) were successfully contacted and interviewed. For communities with two-strata designs, 90.1 percent of high stratum household were successfully contacted and interviewed (364 of 404 households), while a 19.5 percent random sample of low stratum households were interviewed (391 of 2,001 households) (Tables 2 and 3). These are high sampling fractions for studies using survey methodologies which rely upon voluntary participation by surveyed households. Overall, the level of cooperation by households in the harvest survey was high in all communities. The non-response rate was primarily due to logistical problems in contacting households, rather than refusals to participate.

Table 2 Sampling Methodology By Community Harbor Seal and Sea Lion Surveys, 1995

Region and Community	1990 Native <u>Population</u>	Type of <u>Desian</u>	Identified Household <u>Universe</u> '	Surveyed Households	Percentage Households Surveved
1. SOUTHEAST Angoon Craig Haines Hoonah Hydaburg Juneau Kake Ketchikan Klawock Klukwan Pelican Petersburg Saxman Sitka Wrangell Yakutat Region Total	525 288 279 534 342 3,462 514 1,614 392 112 65 334 284 1,797 507 294 11,343	Chain Referral Two Strata Chain Referral Chain Referral	55 31 25 69 14 82 72 19 25 16 18 26 11 600 , 7 55 1,125	51 25 25 63 13 65 49 9 20 5 16 23 9 108 4 47 532	92.7% 80.6% 100.0% 91.3% 92.9% 79.3% 68.1% 47.4% 80.0% 31.3% 88.9% 88.5% 81.8% 18.0% 57.1% 85.5% 47.3%
2. NORTH PACIFIC Chenega Bay Cordova Nanwalek Port Graham Seldovia Seward Tatitlek V a I d e z Region Total	65 272 144 150 48 410 103 239 1,431	Census Two Strata Census Census Two Strata Two Strata Census Chain Referral	23 232 40 58 41 159 25 6 584	14 38 39 58 41 40 19 5	60.9% 16.4% 97.5% 100.0% 100.0% 25.2% 76.0% 83.3% 43.5%
3. UPPER KENAI- Anchorage Homer Region Total	COOK INLET 14,569 189 14,758	Chain Referral Chain Referral	24 4 28	13 3 16	54.2% 75.0% 57.1%
4. KODIAKISLANI Akhiok Karluk Kodiak City Larsen Bay Old Harbor Ouzinkie Port Lions Region Total	72 65 811 124 252 178 150 1,652	Census Census Chain Referral Census Two Strata Census Two Strata	19 18 11 37 88 53 48 274	19 16 10 37 52 51 40 225	100.0% 88.9% 90.9% 100.0% 59.1% 96.2% 83.3% 82.1%

¹ For Chain Referral communities, the "Identified Household Universe" is smaller than the total number of Native households.

Table 2, (Continued) Sampling Methodology by Community, Harbor Seal and Sea Lion Surveys, 1995

Region and Community	1990 Native <u>Population</u>	Type of <u>Desian</u>	Identified Household <u>Universe</u>	Surveyed Households	Percentage Households <u>Surveyed</u>
5. SOUTH ALASKA Chignik Bay Chignik Lagod Chignik Lake False Pass Ivanof Bay King Cove Perryville Sand Point Region Total	85	Census Census Census Census Census Two Strata Census Two Strata	25 21 33 20 8 118 33 140 398	20 20 31 17 6 22 21 37	80.0% 95.2% 93.9% 85.0% 75.0% 18.6% 63.6% 26.4% 43.7%
6. ALEUTIAN ISLAN Akutan Atka Unalaska Region Total	80 91 259 430	Census Census Two Strata	31' 25 105 . 161	31 10 43 84	100.0%, 40.0%, 41. 0% 52.2%
7. PRIBILOF ISLANI St. George St. Paul Region Total	DS 131 504 635	Census Two Strata	42 159 201	42 76 118	100.0% 47.8% 58.7%
8. SOUTH BRISTOL Egegik King Salmon Levelock Naknek Pilot Point Port Heiden South Naknel	86 108 87 236 45 86 k 108	Census Census Census Two Strata Census Census Census	36 26 32 87 27 33 32 273	26 26 32 41 25 33 31 214	72.2% 100.0% 100.0% 47.1% 92.6% 100.0% 96.9% 78.4%
9. NORTH BRISTOL Aleknagik Clark's Point Dillingham Manokotak Togiak Region Total	154 53 1,125 368 535	Census Census Two Strata Two Strata Two Strata	45 14 443 67 118 687	38 14 60 50 107 269	84.4% 100.0% 13.5% 74.6% 90.7% 39.2%
TOTAL (Excl. Anchorage)	34,274 (19,705)		3,731 (3,707)	1,886 (1,873)	50.5% (50.5%)

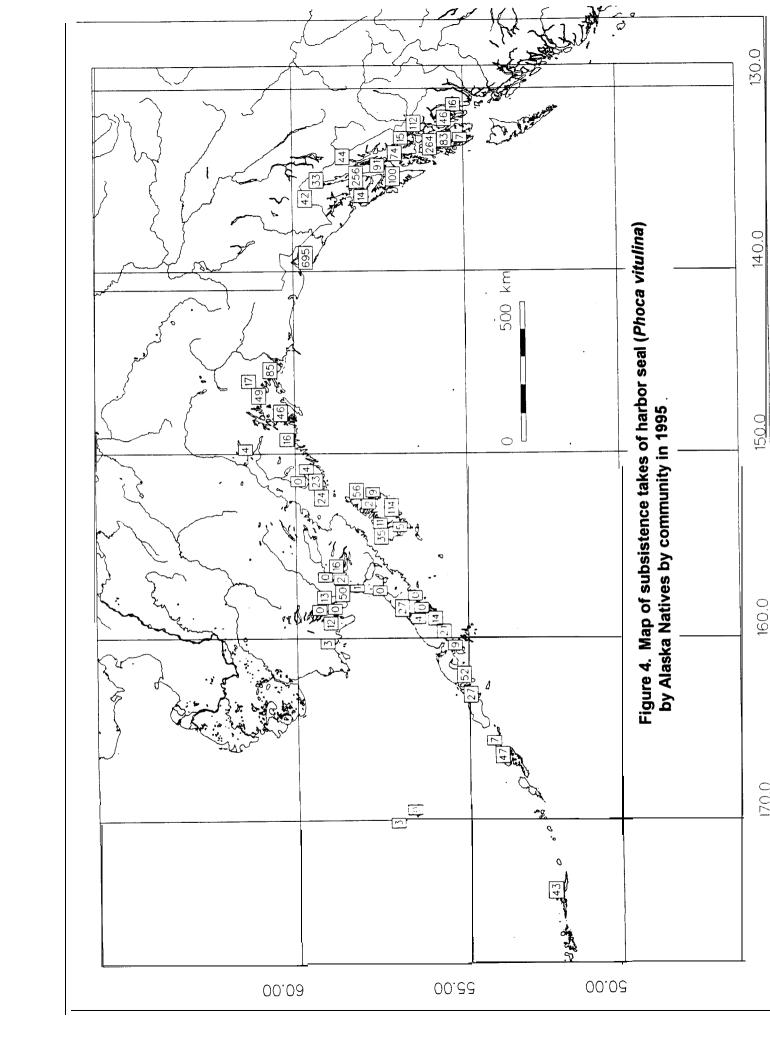
Table 3
Sampling Methodology for Communities
With Two Strata Designs,
Harbor Seal and Sea Lion Surveys, 1995

<u>Community</u>	Number High Stratum Households		Percent High <u>Stratum</u>	Number Low Stratum Households	Sampled Low Stratum <u>Households</u>	Percent Low <u>Stratum</u>
Cordova	14	14	100.0%	218	24	11.0%
Dillingham	31	29	93.5%	412	31	7.5%
King Cove	14	14	100.0%	104	8	7.7%
Manokotak	27	27	100.0%	40	23	57.5%
Naknek	15	15	100.0%	72	26	36.1%
Old Harbor	29	24	82.8%	59	28	47.5%
Port Lions	7	7	100.0%	41	33	80.5%
Sand Point	15	13	86.7%	125	24	19.2%
Seldovia	12	12	100.0%	29	29	100.0%
Seward	12	11	91.7%	147	29	19.7%
Sitka	75	72	96.0%	525	36	6.9%
St. Paul	59	47	79.7%	100	29	29.0%
Togiak	62	56	90.3%	56	51	91.1%
<u>Unalaska</u>	<u>32</u>	<u>23</u>	71.9%	<u>73</u>	<u>20</u>	27 4%
Total	404	364	90.1%	2 00 1	391	19.5%

As stated above, there were two survey rounds, covering the hunting periods of January 1995 through April 1995, and May 1995 through December 1995. In data analysis, information collected during the second round was linked with the data set collected during the first round on a household basis, to complete the entire 1995 calendar year. Incomplete household data sets due to the household being missed during one of the survey rounds were treated as unsurveyed households and were given the mean of their respective sample groups.

In the appendices, the statistical analysis presents harvest data in three different tables for each community. In the first table, the unexpanded reported take is presented for each community, representing actual animals reported killed by surveyed hunters with no fractions of animals. The second table presents the combined estimated expanded take for each stratum in the community. In this table, takes of surveyed hunters are expanded to unsurveyed hunters within the stratum, using different methods depending upon the household sampling design as described above. In this expansion, the proportions of the seasonal takes of the surveyed households are preserved, so takes with unknown months exist in the table. The expansion treats each community as a separate sampling universe. Fractions of animals commonly result from the expansion, which are rounded to the nearest tenth. The third table presents a seasonally adjusted expanded take: takes with unknown months are assigned to months based on the proportion of the known take. The numbers in this third table form the basis for the numbers in the report's narrative.

The calculation of the confidence range around the estimate follow methods for stratified samples in Cochran (1977:5.13, 5.15). In this process, the unexpanded, reported take was used as the lower range for a community if it was higher than the statistically-calculated lower take estimate. This was done because the unexpanded take represents known (not hypothetical) kills.



THE SUBSISTENCE TAKE OF HARBOR SEAL IN 1995

Estimated Size of the Harbor Seal Take. 1995

The estimated size of the total take of harbor seals (Phoca *vitulina*) by Alaska Natives in 1995 is presented in Tables 4 and 5. In 1995, there were an estimated 2,742 harbor seals taken by Alaska Natives for subsistence uses (with a 95 percent confidence range of between 2,184 to 3,679 animals) (Table 4). Of the 1995 subsistence take, 8.9 percent (243 harbor seals) were struck and lost, and 91.1 percent (2,498 harbor seals) were harvested.

The total state estimate for harbor seals is necessarily somewhat indeterminate because of species identification problems in the Bristol Bay area. As discussed in Wolfe and Mishler (1993:61-69), in Bristol Bay there are areas with a seasonal geographic overlap of harbor seal (Phoca *vitulina*) and spotted seal (Phoca *largha*) (see Fig. 3). Local indigenous Yup'ik taxonomies categorize adults of the two Linnaean species as a single type (*issuriq*) in this area, and categorize pups into two different types. Of the total North Bristol Bay take, we classified 28 seals as Phoca *vitulina* and 197 as *Phoca largha*, based on ecological features of the kill (degree of association with seasonal ice) (Appendix B, Table 9). Of the animals classified as Phoca *largha*, 17.0 percent (35 animals) were reported struck and lost, and 83.0 percent (164 animals) were harvested (Appendix B, Table 9). In Table 4, we also assumed the entire South Bristol Bay take of 97 animals was Phoca *vitulina*. Changing these assumptions will change the total statewide take estimate up or down. As stated above, we believe the best estimate of the subsistence take in 1995 is 2,742 harbor seals, based on the assumptions above.

Table 4
Estimated Subsistence Takes of Harbor Seal (*Phoca vitulina*) and Sea Lion (*Eumetopias jubatus*)
By Alaska Natives, 1992 - 1995

		Es	stimated Tot		Lower and Upper Confidence Range
	<u>Year</u>	<u>Harvest</u>	and Lost	<u>Take</u>	for Total Take
Harbor Seal	1992	2,501 67.6%	353 1 2 .4%	2,854 100.0%	2,293 - 3,692
	1993	2,365 66.4%	371 13.6%	2,736 100.0%	2,334 - 3,471
	1994	2,313 66.2%	308 11. 6 %	2,621 100.0%	2,110 - 3,457
	1995	2,498 91.1%	243 6.9%	2,742 100.0%	2,184 - 3,679
Sea Lion	1992	370 67.4 %	179 32.6 %	549 100.0%	452 - 712
	1993	348 71.4 %	139 26.6%	487 100.0%	390 - 629
	1994	336 60.6%	80 1 9.2 %	416 100.0%	330 - 554
	1995	307 90.5%	32 9.5 %	339 100.0%	258 - 465

Table 5
Regional Distribution of Subsistence Takes of
Harbor Seal (*Phoca vitulina*) by Alaska Natives, 1995
With Confidence Intervals and Statistical Ranges

					Total Take				
	ш	Estimated Total		Confidence	Lower	Upper	Percentage	:	
		Struck			Range	Range	of Take	Per Capita	Struck and
Region	Harvest	and Lost	Take	(% -/+)	Estimate	Estimate	by Region	Harvest	Lost Kate
100 de 10	17101	1709	1890.0	%	1547.0	2453.9	68.9%	0.14	%0.6
	252.1	117	263.9	51.4%	189.0	399.4	9.6%	0.15	4.4%
North Pacific Killin	2.7		3.7	%8 68	2.0	7.0	0.1%	0.03	0.0%
Upper Kenal-Cook Inlet	9. C	0 0	232.2	15.8%	207.4	268.8	8.5%	0.26	3.9%
Kodiak Island	417.0	11.5	128.0	61.0%	88.0	206.1	4.7%	0.09	8.6%
South Alaska Peninsula	0.71	9.7	96.6	%2.55	53.0	154.3	3.5%	0.19	10.1%
Aleutian Islands	9. c	- C	. c	88.4%	2.0	4.7	0.1%	00.00	0.0%
Pribilot Islands	68.3 68.3	28.3	96.6	30.1%	82.0	125.6	3.5%	60.0	29.3%
South Bristol Bay	25.0	2.4	283	109.6%	14.0	59.2	1.0%	0.01	8.5%
AI ASKA	2498.5	243.3	2741.8	34.2%	2184.4	3679.1	100.0%		8.9%
Percentage of Take	91.1%	8.9%	100.0%						

 \mathbf{S}_{D} rce: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1996.

Table 6
Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 1995
With Confidence Intervals and Statistical Ranges, by Community

		Percent of	Percent of						
	Harbor	Native	Native		Harbor	Total	To	otal Take	
	Seal	Households	Households	Harbor	Seal	Harbor	Confidence	Lower	Upper
	Harvested	Harvesting	Using	Seal	Struck	Seal	Interval	Range	Range
Community	Per Capita	Harbor Seal	Harbor Seal	Harvested	and Lost	Take	(+I- %)	Estimate	Estimate
SOUTHEAST									
Angoon	.15			80.9	9.7	90.6	19.4%	84.0	108.1
Craig	.24			69.4	13.6	83.1	24.3%	67.0	103.2
Haines	.09			24.0	9.0	33.0	0.0%	33.0	33.0
Hoonah	.44			236.6	19.7	256.3	13.1%	234.0	289.9
Hydaburg	.02			6.5	0.0	6.5	27.6%	6.0	8.2
Juneau	.01			42.9	1.3	44.2	27.2%	35.0	56.2
Kake	.14			72.0	1.5	73.5	32.7%	50.0	97.5
Ketchikan	.03			46.4	0.0	46.4	135.1%	22.0	109.2
Klawock	.67			263.8	0.0	263.8	37.6%	211.0	362.9
Klukwan	.31			35.2	6.4	41.6	105.7%	13.0	85.6
Pelican	.21			13.5	0.0	13.5	24.5%	12.0	16.8
Petersburg	.04			13.6	1.1	14.7	19.3%	13.0	17.5
Saxman	.06			15.9	0.0	15.9	29.1%	13.0	20.5
Sitka	.05	6.3%	84.7%	93.8	6.3	100.0	6.4%	96.0	106.4
Wrangell	.18			89.3	22.8	112.0	78.6%	64.0	200.1
Yakutat	2.09			615.5	79.6	695.1	20.7%	594.0	838.7
NORTH PACIFIC									
Chenega Bay	.53	42.9%	57.1%	44.4	1.6	46.0	40.6%	28.0	64.7
Cordova	.13	9.62	30.9%	83.4	2.0	85.4	80.2%	45.0	154.0
Nanwalek	.15	25.6%	92.3%	23.6	0.0	23.6	9.8%	23.0	25.9
Port Graham	.14	8.6%	87.9%	23.0	0.0	23.0	0.0%	23.0	23.0
Seldovia	.04	4.9%	34.1%	4.0	0.0	4.0	0.0%	4.0	4.0
Seward	.03	0.7%	13.7%	10.9	5.5	16.4	56.6%	15.0	25.6
Tatitlek	.61	21.1%	84.2%	46.1	2.6	48.7	57.5%	37.0	76.7
Valdez	.64			16.8	0.0	16.8	52.2%	14.0	25.6
UPPER KENAI-C	OOK INLET								
Anchorage	.04			3.7	0.0	3.7	89.8%	2.0	7.0
Homer	.00			0.0	0.0	0.0	0.0%	0.0	0.0
KODIAK ISLAND									
Akhiok	.08	21.1%	36.8%	5.0	0.0	5.0	0.0%	5.0	5.0
Karluk	.47	43.8%	37.5%	28.1	6.8	34.9	25.7%	31.0	43.8
Kodiak City	.19			8.8	0.0	8.8	43.8%	8.0	12.7
Larsen Bay	.12	10.8%	45.9%	11.0	0.0	11.0	0.0%	11.0	11.0
Old Harbor	.38	44.6%	100.0%	112.0	2.4	114.4	15.7%	96.4	132.4
Ouzinkie	.35	29.4%	45.1%	56.1	0.0	56.1	10.4%	54.0	62.0
Port Lions	.01	4.2%	8.3%	2.0	0.0	2.0	0.0%	2.0	2.0
SOUTH ALASKA	PENINSULA	1							
Chignik Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lagoon	.00	0.0%	0.0%	0.0		0.0	0.0%	0.0	
Chignik Lake	.02	6.5%	74.2%	3.2		4.3	37.8%	4.0	
False Pass	.42	41.2%	58.8%	25.9		27.1	27.2%		
Ivanof Bay	.56	83.3%	100.0%	18.7		21.3	42.1%		
King Cove	:15	20.3%	44.1%	49.0		52.0	94.2%		
Perryville	.09	14.3%	90.5%	11.0		14.1	58.9%		
Sand Point	.02	4.1%	16.1%	. 9.2		9.2			

Table 6 (Continued)
Subsistence Harbor Seal Harvest, Take, and Use by Alaska Natives, 1995
With Confidence Intervals and Statistical Ranges, by Community

		Percent of	Percent of						
	Harbor	Native	Native		Harbor	Total		tal Take	
	Seal	Households	Households	Harbor	Seal		Confidence	Lower	Upper
	Harvested	Harvesting	Using	Seal	Struck	Seal	Interval	Range	Range
Community	Per Capita	Harbor Seal'	Harbor Seal'	Harvested	and Lost	Take	(+/- %)	Estimate	Estimate
ALEUTIAN ISLANI	DS								
Akutan	.10	9.7%	100.0%	7.0	0.0	7.0	0.0%	7.0	7.0
Atka	.45	50.0%	90.0%	42.5	0.0	42.5	66.6%	17.0	70.8
Unalaska	.13	8.8%	26.7%	37.4	9.7	47.1	62.2%	29.0	76.5
PRIBILOF ISLAND	S								
St. George	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
St. Paul	.00	0.8%	3.9%	2.5	0.0	2.5	88.4%	2.0	4.7
SOUTH BRISTOL	BAY								
Egegik	.02	3.8%	7.7%	1.4	0.0	1.4	103.3%	1.0	2.8
King Salmon	.16	15.4%	34.6%	13.0	3.0	16.0	0.0%	16.0	16.0
Levelock	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Naknek	.14	14.4%	56.3%	34.8	15.3	50.2	54.0%	36.0	77.3
Pilot Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Port Heiden	.16	33.3%	87.9%	17.0	10.0	27.0	0.0%	27.0	27.0
South Naknek	.02	6.5%	35.5%	2.1	0.0	2.1	24.1%	2.0	2.6
NORTH BRISTOL	BAY								
Aleknagik	.00	13.2%	<i>78.</i> 9%	0.0	0.0	0.0	0.0%	0.0	0.0
Clark's Point	.00	50.0%	92.9%	0.0	0.0	0.0	0.0%	0.0	0.0
Dillingham	.01	4.2%	59.6%	13.3	0.0	13.3	188.5%	1.0	38.3
Manokotak	.03	27.5%	81.1%	9.3	2.4	11.7	38.2%	10.0	16.1
Togiak	.01	29.0%	94.4%	3.3	0.0	3.3	44.0%	3.0	4.8
ALASKA TOTAL				2498.5	243.3	2741.8	34.2%	2184.4	3679.1
SPOTTED SEALS	, NORTH E	BRISTOL BA	·Υ						
Aleknagik	.07	13.2%	78.9%	11.8	13.0	24.9	29.2%	21.0	32.1
Clark's Point	.22	50.0%	92.9%	10.0		15.0	0.0%	15.0	15.0
Dillingham	.01	4.2%	59.6%	7.5		15.0	24.9%	14.0	18.7
Manokotak	.07	27.5%	81.1%	22.9		26.5	35.6%	20.0	35.9
Togiak	.23	29.0%	94.4%	111.5	4.4	115.9	13.5%	105.0	131.5
TOTAL WITH OTH	IER SEALS	S		2662.2	276.8	2939.0	33.1%	2359.4	3912.3

¹ In North Bristol Bay, percentage of households harvesting and using issuriq, as was done in last year's report.

Geographic Distribution of Harbor Seal Takes

Table 5 shows the regional distribution of harbor seal takes by Alaska Natives in 1995. The largest takes in terms of absolute numbers were taken by the Tlingit and Haida of the Southeast region. About 68.9 percent of the statewide take of harbor seals (1,890 animals), were taken by hunters in Southeast Alaska (Table 5). The regions ranked second and third were the North Pacific Rim (263 seals, or 9.6 percent of the statewide take) and Kodiak island (232 seals, or 8.5 percent). The remainder of the statewide harbor seal take (356 animals, or 13.0 percent) was distributed among the other six regions.

The geographic distribution of harbor seal takes by community is shown in Table 6 and Fig. 4. Of the top ten communities (in terms of absolute number of harbor seals taken in 1995), eight were in the Southeast region, one in the North Pacific Rim region, and one in the Kodiak Island region. The ten top ranking communities were Yakutat (695 seals), Klawock (264 seals), Hoonah (256 seals), Old Harbor (114 seals), Wrangell (128 seals), Sitka (100 seals), Angoon (91 seals), Cordova (85 seals), Craig (83 seals), and Kake (44 seals). There were eight surveyed communities with no reported harbor seals taken in 1995 -- Aleknagik, Chignik Bay, Chignik Lagoon, Clark's Point, Homer, Levelock, Pilot Point, and St. George.

Per capita harvests are the number of harbor seals harvested per Alaska Native living in a community. It is an estimate of the amount harvested per person in an area, controlling for differences in population size. The top ten communities in terms of harvests per capita in 1994 were Yakutat (2.09 harbor seals harvested per person), Klawock (.67), Valdez (.64), Tatitlek (.61), Ivanof Bay (.56), Chenega Bay (.53), Karluk (.47), Atka (.45), Hoonah (.44), and False Pass (.42). There was greater panty across regions in per capita harvests compared with total community take (Table 6). Among the top ten communities for per capita harvests, three were in the North Pacific Rim

region, three were in the Southeast region, two were in the Aleutian Islands region, and one each was in the Kodiak Island and South Alaska Peninsula regions.

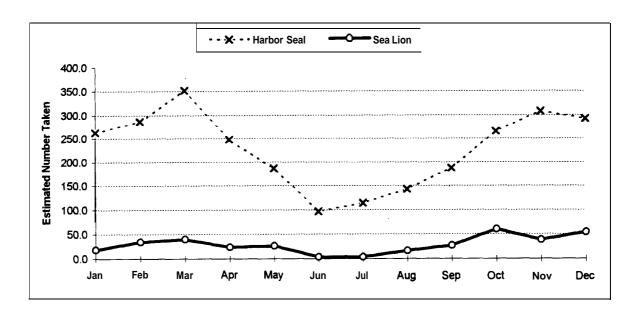
Seasonal Distribution of Harbor Seal Takes

The seasonal distribution of the statewide harbor seal take in 1995 is depicted in Figs. 5 and 6, and conforms with the general seasonal patterns for previous years. Harbor seals were reported killed during every month of 1995. In 1995, hunting early in the year (January, February, and March) was the most productive of any year since surveys began in 1992. The drop in hunting productivity during late spring and early summer of 1995 (about May through July) was characteristic of other years. In 1995, hunting productivity was the lowest ever recorded during August and September (see Fig. 6). Productivity increased the last three months of the year (October through December). The statewide total masks differences in seasonal patterns between regions and communities, which are depicted in Appendices B and C.

Aae and Sex Composition of Harbor Seal Harvests

The estimated age and sex composition of the 1995 harbor seal harvests are shown in Tables 7 and 8 by geographic region. Hunters reported harvesting male harbor seals over female harbor seals by a ratio of about 2 to I (1,305 males to 631 females of harvests with reported sex). Hunters also reported harvesting substantially more adult harbor seals than juveniles or pups (5.3 to 1). Overall, adult females comprised about 27 percent of the total known harvest of harbor seals in 1995. Hunters did not report the sex for 23 percent of the harvest or the age for about 7 percent of the harvest. The age and sex are also unknown for animals which were struck and lost. A further analysis of age and sex composition is found in the Discussion section.

Figure 5 Seasonally Adjusted Takes of Harbor Seal and Sea Lion By Alaska Natives, 1995



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Harbor Seal	263.1	267.1	351.2	247.5	166.7	96.0	113.6	142.3	166.9	265.5	306.4	292.7	
Percentage	9.6%	10.5%	12.6%	9.0%	6.6%	3.5%	4.1%	5.2%	6.6%	9.7%	11.2%	10.7%	
Cum. Percer	nt 9.6%	6 20.1 %	32.9%	41.9%	46.7%	52.2%	55.4%	61.6%	66.4%	76.1%	89.3%	100%	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sea Lion	17.6	33.6	39.3	23.0	26.0	3.6	3.4	15.7	26.5	59.0	36.3	53.0
Percentage	5.2%	9.9%	11.6%	6.0%	7.7%	1.1%	1.0%	4.6%	7.0%	17.4%	11.3%	15.6%
Cum. Percent	5.2%	15.1%	26.7%	33.5%	41.2%	42.2%	43.3%	47.9%	55.7%	73.1%	64.4%	100%

Figure 6
Estimated Seasonally Adjusted Takes of Harbor Seal by Alaska Natives, 1992, 1993, 1994, and 1995

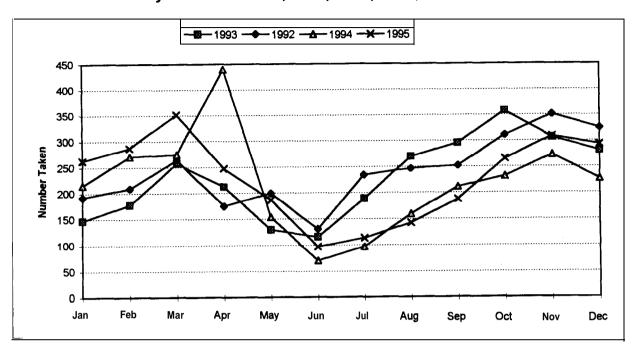


Figure 7
Estimated Seasonally Adjusted Takes of Sea Lion
by Alaska Natives, 1992, 1993, 1994, and 1995

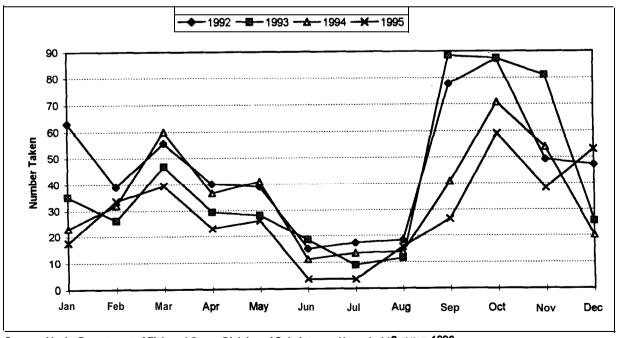


Table 7
Age and Sex Composition of Harbor Seal Harvests
By Alaska Natives, 1995

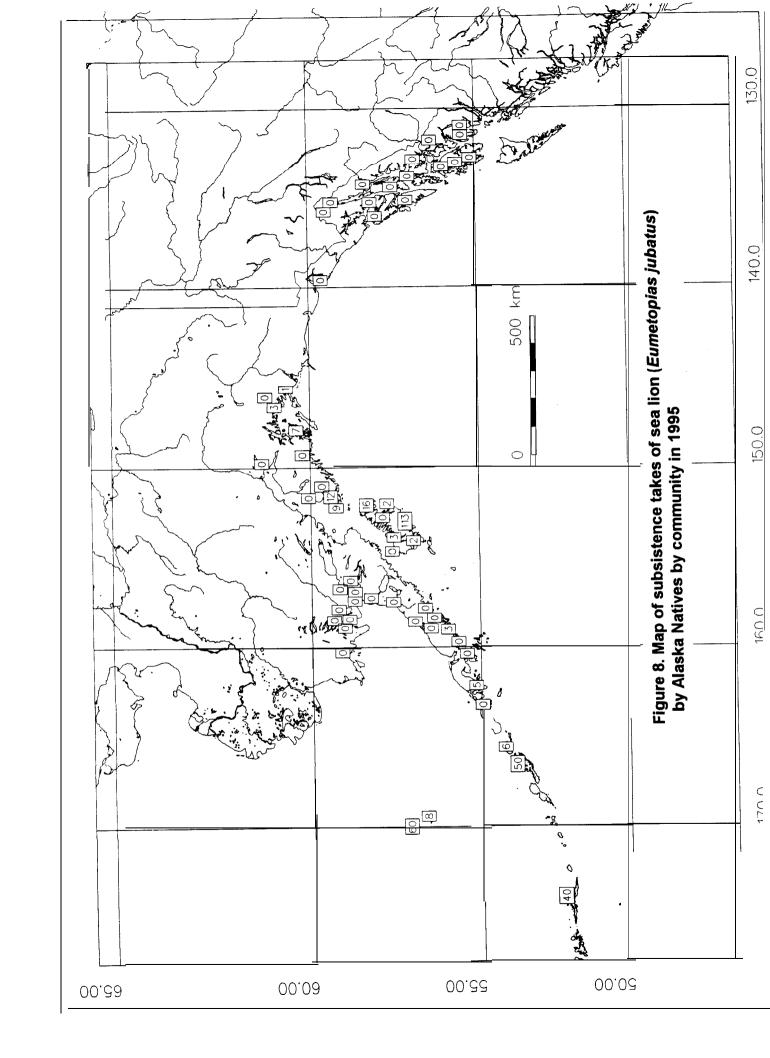
			Unknown	
_	Male	Female	Sex	Total
Adult	1056.0	529.4	368.7	1954.1
Row Percent	54.0%	27.1%	18.9%	100.0%
Column Percent	80.9%	83.9%	65.5%	78.2%
Juvenile	209.0	78.0	56.2	343.1
Row Percent	60.9%	22.7%	16.4%	100.0%
Column Percent	16.0%	12.4%	10.0%	13.7%
Pup	14.4	1.1	13.4	28.8
Row Percent	49.8%	3.8%	46.4%	100.0%
Column Percent	1.1%	0.2%	2.4%	1.2%
Unknown Age	26.0	22.5	124.5	173.0
Row Percent	15.0%	13.0%	72.0%	100.0%
Column Percent	2.0%	3.6%	. 22.1%	6.9%
Total	1305.3	631.0	562.7	2499.0
Row Percent	52.2%	25.3%	22.5%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Table 8

Age and Sex Composition of Harbor Seal Harvests

By Alaska Natives by Region, 1995

			Upper							
		North	Kenai-		South			South	North	
		Pacific	Cook	Kodiak	Alaska	Aleutian	Pribilof	Bristol	Bristol	
AGE AND SEX	Southeast	Rim	Inlet	Island	Peninsula	Islands	Islands	Bay	Bay	Alaska
Adult Male	793.6	61.7	1.8	59.8	54.1	54.2	0.0	6.4	4.3	1058.0
Adult Female	426.8	44.6	0.0	40.3	8.0	3.9	0.0	4.0	3.7	529.4
Adult Unknown Sex	279.9	24.8	0.0	6.6	7.0	1.4	0.0	46.8	2.2	368.7
Juvenile Male	77.7	23.8	0.0	87.4	12.7	10.5	2.5	0.0	14.4	209.0
Juvenile Female	20.5	0.0	0.0	39.2	18.5	0.0	0.0	0.0	1.7	78.0
Juvenile Unknown Sex	11.3	12.2	0.0	7.6	16.1	7.0	0.0	2.0	0.0	56.2
Pup Male	0.0	13.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	14.4
Pup Female	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Pup Unknown Sex	8.8	1.3	0.0	0.0	1.3	0.0	0.0	2.0	0.0	13.4
Mate Unknown Age	25.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	26.0
Female Unknown Age	22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5
Unknown Age and Sex	51.9	50.6	1.8	1.0	2.1	10.0	0.0	7.0	0.0	124.5
TOTAL	1719.1	252.1	3.7	223.0	117.0	88.9	2.5	88.3	28.4	2499.0
AGE ONLY										
Adult	1500.3	151.0	1.8	106.8	67.2	59.5	0.0	57.3	10.2	1954.1
Juvenile	109.6	36.0	0.0	114.2	45.3	17.4	2.5	2.0	16.1	343.1
Pup	9.8	14.5	0.0	0.0	2.5	0.0	0.0	2.0	0.0	28.8
Unknown Age	99.4	50.6	1.8	2.0	2.1	10.0	0.0	7.0	0.0	173.0
TOTAL	1719.1	252.1	3.7	223.0	117.0	86.9	2.5	68.3	26.4	2499.0
SEX ONLY										
Male	896.3	118.7	1.8	128.2	88.0	64.8	2.5	6.4	18.7	1305.3
Female	470.9	44.6	0.0	79.8	22.6	3.9	0.0	4.0	5.5	631 .0
Unknown Sex	351.9	88.9	1.8	15.3	26.4	18.3	0.0	57.9	2.2	562.7
TOTAL	1719.1	252.1	3.7	223.0	117.0	86.9	2.5	68.3	28.4	2499.0



THE SUBSISTENCE TAKE OF SEA LION IN 1995

Estimated Size of the Sea Lion Take, 1994

The estimated size of the total take of Steller sea lions by Alaska Natives in 1995 is presented in Tables 4 and 9. In 1995, there were an estimated 339 sea lions taken by Alaska Natives for subsistence uses (with a 95 percent confidence range of between 258 to 465 animals) (Table 4). Of the 1995 subsistence take, 9.5 percent (32 sea lions) were struck and lost, and 90.5 percent (307 sea lions) were harvested.

Geographic Distribution of Sea Lion Takes

Table 9 shows the regional distribution of sea lion takes in 1995 by Alaska Natives. In 1995, the largest takes were by the Alutiiq of the Kodiak Island region (136 sea lions, or 40.0 percent of the total statewide take of sea lions). The four other regions harvesting sea lions were the Aleutian Islands (96 sea lions, 28.3 percent), the Pribilof Islands (68 sea lions, 20.0 percent), the North Pacific Rim (31 sea lions, 9.3 percent), and the South Alaska Peninsula (8 sea lions, 2.4 percent) (Table 9).

The geographic distribution of sea lion takes by community is shown in Table 10 and Fig. 8. The five top ranking communities were Old Harbor (113 sea lions), St. Paul (60 sea lions), Unalaska (50 sea lions), Atka (40 sea lions), and Ouzinkie (16 sea lions). These five communities accounted for 82.0 percent of the total Alaska take (279 sea lions). In 1995, 41 of 58 surveyed communities reported no sea lions taken. Six more communities reported a take of less than five sea lions. Only eleven communities had harvests of five or more sea lions in **1994**.

Table 9
Regional Distribution of Subsistence Takes of Sea Lion (*Eumetopias jubatus*) by Alaska Natives, 1995 With Confidence Intervals and Statistical Ranges

				Total Take	ake				
	ш	Estimated Total		Confidence	Lower	Upper	Percentage		
-		Struck		Interval	Range	Range	of Take	Per Capita	Struck and
Region	Harvest	and Lost	Take	%(-/+)	Estimate	Estimate	by Region	Harvest	Lost Rate
Southeast	0.0	0.0	0.0	%0.0	0.0	0.0	0.0%	0.00	0.0%
North Pacific Rim	28.4	3.0	31.4	29.9%	28.0	40.8	9.3%	0.02	9.5%
Upper Kenai-Cook Inlet	0.0	0.0	0.0	%0.0	0.0	0.0	%0.0	0.00	0.0%
Kodiak Island	127.9	7.7	135.7	15.2%	117.7	156.2	40.0%	0.15	5.7%
South Alaska Peninsula	8.1	0.0	8.1	45.6%	7.0	11.9	2.4%	0.01	0.0%
Aleutian Islands	85.0	11.1	96.1	70.1%	58.0	163.5	28.3%	0.18	11.6%
Pribilof Islands	97.6	10.3	6.79	36.4%	47.0	92.7	20.0%	0.08	15.1%
South Bristol Bay	0.0	0.0	0.0	%0'0	0.0	0.0	%0.0	0.00	%0.0
North Bristol Bay	0.0	0.0	0.0	%0.0	0.0	0.0	%0.0	0.00	0.0%
ALASKA	307.1	32.1	339.2	37.1%	257.7	465.0	100.0%		9.5%
Percentage of Take	90.5%	9.5%	100.0%						,

Seasonal Distribution of Sea Lion Takes

The seasonal distribution of the sea lion take in 1995 is depicted in Figs. 5 and 7. Sea lions were reported killed during every month of 1995. Seasonal peaks in subsistence productivity occurred during Febuary-March and October-December, while summer (June-July) was the period of lowest productivity. Hunting productivity in 1995 was relatively low in comparison with the three previous years (199294): productivity was the lowest ever reported in nine of twelve months (January, March-July, September-November). The statewide total masks differences in seasonal patterns between regions and communities, which are depicted in Appendices B and C.

Ane and Sex Composition of Sea Lion Harvests

The reported age and sex compositions of the 1995 sea lion harvests are shown in Tables 11 and 12 by geographic region. Hunters reported harvesting male sea lions over female sea lions by a ratio of about 2 to 1 (169 males to 83 females of animals with sex reported). Hunters also reported harvesting juvenile sea lions over adults by about 2 to 1 (194 adolescents to 97 adults). Adult females comprised about 13 percent of the total known harvest of sea lions in 1995. Hunters did not report the sex for 18 percent of the harvest or the age for about 5 percent of the harvest. The age and sex also are unknown for sea lions which were struck and lost.

HUNTING PARTICIPATION

Participation in hunting in 1995 was the lowest of the four survey years (1992-95). Based on survey findings, the estimated number of households which reported at least one member hunting harbor seal was 1,014 households in 1992, 854 households in 1993, 971 households in 1994, and 805 households in 1995 (Table 13). The estimated number of households which reported at least one member hunting sea lions

Table 10
Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 1995
With Confidence Intervals and Statistical Ranges, by Community

		Percent of Native	Percent of Native				T	otal Take	
	Sea Lion	Households	Households		Sea Lion	Total	Confidence	Lower	Upper
			Using	Sea Lion		Sea Lion			
Community	Harvested	Harvesting	•	Harvested		Take	Interval	Range Estimate	Range
COUTLIEACT ALA	Per Capita	Sea Lion	Sea Lion	narvesteu	and Lost	Take	(+1- 70)	Estimate	Estimate
SOUTHEAST ALA				0.0	0.0	0.0	0.00/	0.0	0.0
Angoon	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Craig	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Haines	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Hoonah	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Hydaburg	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Juneau	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Kake	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Ketchikan	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Klawock	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Klukwan	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Pelican	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Petersburg	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Saxman	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Sitka	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Wrangell	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Yakutat	.00			0.0	0.0	0.0	0.0%	0.0	0.0
NORTH PACIFIC	RIM								
Chenega Bay	.08	14.3%	50.0%	6.6	0.0	6.6	83.3%	4.0	12.0
Cordova	.00	0.0%	0.0%	0.0	1.0	1.0	0.0%	1.0	1.0
Nanwalek	.06	12.8%	59.0%	9.2	0.0	9.2	15.2%	9.0	10.6
Port Graham	.06	10.3%	60.3%	10.0	2.0	12.0	0.0%	12.0	12.0
Seldovia	.00	0.0%	14.6%	0.0	0.0	0.0	0.0%	0.0	0.0
Seward	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Tatitlek	.04	5.3%	36.8%	2.6	0.0	2.6	96.0%	2.0	5.2
Valdez	.00			0.0	0.0	0.0	0.0%	0.0	0.0
UPPER KENAI-CO	OOK INLET								
Anchorage	.00			0.0	0.0	0.0	0.0%	0.0	0.0
Homer	.00			0.0		0.0	0.0%	0.0	0.0
KODIAK ISLAND									
Akhiok	.02	5.3%	21.1%	1.0	1.0	2.0	0.0%	2.0	2.0
Karluk	.00	0.0%	0.0%	0.0		0.0	0.0%	0.0	0.0
Kodiak City	.05	5.575	0.070	2.2			59.1%	2.0	
Larsen Bay	.02	2.7%	2.7%	2.0			0.0%	3.0	3.0
Old Harbor	.37	47.0%	97.6%	107.1	5.7		15.2%	95.7	130.1
Ouzinkie	.10	15.7%	21.6%	15.6			13.2%	15.0	17.6
Port Lions	.00	0.0%	0.0%	0.0			0.0%	0.0	0.0
SOUTH ALASKA			0.070	0.0	0.0	0.0	0.070	0.0	0.0
Chignik Bay	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Chignik Lagoon	.00	0.0%	0.0%	0.0			0.0%		
	.00	0.0%	6.5%	0.0			0.0%		
Chignik Lake				0.0					
False Pass	.00	0.0% 0.0%	0.0%				0.0%		
Ivanof Bay	.00		0.0%	0.0			0.0%		
King Cove	.02	1.7%	1.7%	5.0			0.0%		
Perryville	.03	4.0%	52.4%	3.1	0.0		118.2%	2.0	
Sand Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0

Table 10 (Continued)
Subsistence Sea Lion Harvest, Take, and Use by Alaska Natives, 1995
With Confidence Intervals and Statistical Ranges, by Community

		Percent of	Percent of						
		Native	Native						
	Sea Lion	Households	Households		Sea Lion	Total	To	tal Take	
	Harvested	Harvesting	Using	Sea Lion		Sea Lion	Interval	Range	Range
Community	Per Capita	Sea Lion	Sea Lion	Harvested	and Lost	Take	(+/- %)	Estimate	Estimate
ALEUTIAN ISLAN	IDS								
Akutan	.08	9.7%	100.0%	6.0	0.0	6.0	0.0%	6.0	6.0
Atka	.42	30.0%	90.0%	40.0	0.0	40.0	89.7%	16.0	75.9
Unalaska	.13	6.6%	25.8%	39.0	11.1	50.1	62.9%	36.0	81.6
PRIBILOF ISLAN	DS								
St. George	.03	4.8%	19.0%	4.0	4.0	8.0	0.0%	8.0	8.0
St. Paul	.08	17.8%	62.3%	53.6	6.3	59.9	41.3%	39.0	84.7
SOUTH BRISTOL	BAY								
Egegik	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
King Salmon	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Levelock	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Naknek	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Pilot Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Port Heiden	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
South Naknek	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
NORTH BRISTOL	BAY								
Aleknagik	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Clark's Point	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Dillingham	.00	0.0%	0.5%	0.0	0.0	0.0	0.0%	0.0	0.0
Manokotak	.00	0.0%	0.0%	0.0	0.0	0.0	0.0%	0.0	0.0
Togiak	.00	0.0%	0.9%	0.0	0.0	0.0	0.0%	0.0	0.0
ALASKA TOTAL				307.1	32.1	339.2	37.1%	257.7	465.0

Table 11

Age and Sex Composition of Sea Lion Harvests

By Alaska Natives, 1995

			Unknown	
	Male	Female	Sex	Total
Adult	47.5	39.7	10.1	97.3
Row Percent	48.8%	40.8%	10.4%	100.0%
Column Percent	28.2%	47.7%	18.3%	31.7%
Juvenile	121.1	43.5	29.1	193.7
Row Percent	62.5%	22.4%	15.0%	100.0%
Column Percent	71.8%	52.3%	52.6%	63.1%
Pup	0.0	0.0	0.0	0.0
Row Percent	0.0%	0.0%	0.0%	0.0%
Column Percent	0.0%	0.0%	0.0%	0.0%
Unknown Age	0.0	0.0	16.1	16.1
Row Percent	0.0%	0.0%	100.0%	100.0%
Column Percent	0.0%	0.0%	29.0%	5.2%
Total	168.6	83.2	55.4	307.1
Row Percent	54.9%	27 1%	18.0%	100.0%
Column Percent	100.0%	100 0%	100.0%	100.0%

Table 12

Age and Sex Composition of Sea Lion Harvests

By Alaska Natives by Region, 1995

			Upper							
		North	Kenai-		South			South	North	
		Pacific	Cook	Kodiak	Alaska	Aleutian	Pribilof	Bristol	Bristol	
AGE AND SEX	Southeast	Rim	Inlet	Island	Peninsula	Islands	Islands	Bay	Bay	Alaska
Adult Male	0.0	9.4	0.0	8.0	3.6	20.0	6.5	0.0	0.0	47.5
Adult Female	0.0	2.7	0.0	18.5	2.6	15.9	0.0	0.0	0.0	39.7
Adult Unknown Sex	0.0	3.0	0.0	5.7	0.0	1.4	0.0	0.0	0.0	10.1
Juvenile Male	0.0	2.0	0.0	62.1	2.0	29.2	34.8	0.0	0.0	121.1
Juvenile Female	0.0	1.6	0.0	30.1	0.0	9.2	2.5	0.0	0.0	43.5
Juvenile Unknown Sex	0.0	7.0	0.0	3.4	0.0	8.3	10.3	0.0	0.0	29.1
Pup Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pup Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pup Unknown Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Male Unknown Age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Female Unknown Age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown Age and Sex	0.0	2.6	0.0	0.0	0.0	10.0	3.4	0.0	0.0	16.1
TOTAL	0.0	28.4	0.0	127.9	8.1	85.0	57.6	0.0	0.0	307.1
AGE ONLY										
Adult	0.0	15.1	0.0	32.3	6.1	37.2	8.5	0.0	0.0	97.3
Juvenile	0.0	10.7	0.0	95.6	2.0	37.7	47.7	0.0	0.0	193.7
Pup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown Age	0.0	2.6	0.0	0.0	0.0	10.0	3.4	0.0	0.0	16.1
TOTAL	0.0	28.4	0.0	127.9	8.1	85.0	57.6	0.0	0.0	367.1
SEX ONLY										
Male	0.0	11.4	0.0	70.1	5.6	40.2	41.3	0.0	0.0	168.6
Female	0.0	4.3	0.0	48.7	2.6	25.1	2.5	0.0	0.0	83.2
Unknown Sex	0.0	12.7	0.0	9.1	0.0	19.7	13.8	0.0	0.0	55.4
TOTAL	0.0	26.4	0.0	127.9	8.1	85.0	57.6	0.0	0.0	367.1

Table 13
Participation Rates of Alaska Native Households in
Hunting Harbor Seal or Sea Lion, 1992, 1993, 1994, and 1995

	Н	IARBOR SEA	۱L		SEA LION	
		Percentage	-		_	Percentage
		of Household	U		of Household	
	Universe	Universe	Households	Universe	Universe	Households
STUDY YEAR 1992					/	
Did Not Hunt	2698	73%		3513	95%	
Hunted Unsuccessfully	290	8%	29%	59	2%	30%
Hunted Successfully	724	19%	71%	140	4%	70%
Total Households	3712	100%		3712	100%	
Total Hunting Households	1014	27%	100%	199	5%	100%
STUDY YEAR 1993						
Did Not Hunt	3510	80%		4142	95%	
Hunted Unsuccessfully	216	5%	25%	78	2%	35%
Hunted Successfully	638	15%	75%	144	3%	65%
Total Households	4364	100%		4364	100%	~ =
Total Hunting Households	854	20%	100%	222	5%	100%
STUDY YEAR 1994						
Did Not Hunt	3311	77%		4072	95%	
Hunted Unsuccessfully	362	8%	37%	85	2%	40%
Hunted Successfully	608	14%	63%	125	3%	60%
Total Households	4282	100%		4282	100%	
Total Hunting Households	971	23%	100%	210	5%	100%
STUDY YEAR 1995						
Did Not Hunt	2926	78%		3573	96%	
Hunted Unsuccessfully	208	6%	26%	39	1%	24%
Hunted Successfully	597	16%	74%	120	3%	76%
Total Households	3731	100%		3731	100%	
Total Hunting Households	805	22%	100%	158	4%	100%

Figure 9
Specialization in Harbor Seal Takes:
Percentage of Hunters by Percentage of Take, 1995

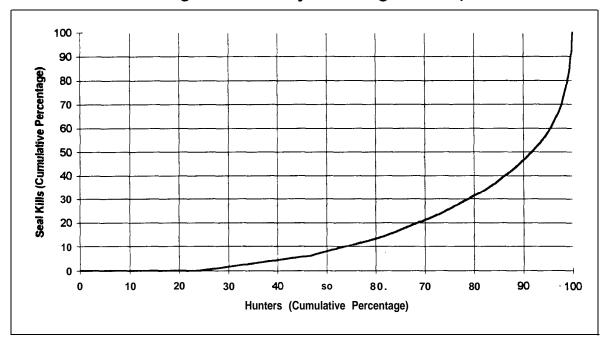


Figure 10
Specialization in Sea Lion Takes:
Percentage of Hunters by Percentage of Take, 1995

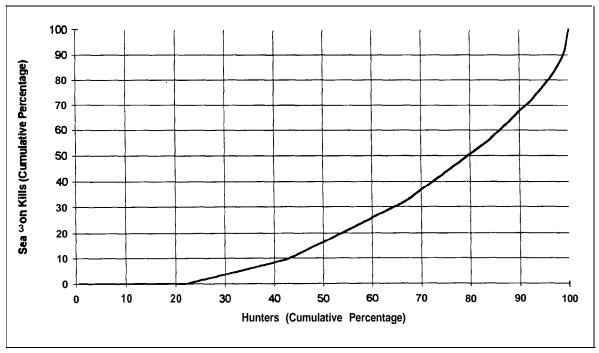


Table 14

Comparison of Households Interviewed in 1992, 1993, 1994, and 1995 (Unweighted Numbers)

HARBOR SEAL

COMMUNITIES WITH FOUR YEARS OF DATA

846 Households interviewed in 1992, 1993, 1994, and 1995

277 Households did not hunt in any year

156 Households hunted in 1 of the 4 years

148 Households hunted in 2 of the 4 years

126 Households hunted in 3 of the 4 years

139 Households hunted in 4 of the 4 years

ST. PAUL (3 YEARS OF DATA)

33 Households interviewed in 1992, 1994, and 1995

30 Households did not hunt any year

0 Households hunted in 1 of the 3 years

3 Households hunted in 2 of the 3 years

0 Households hunted in 3 of the 3 years

SEA LION

COMMUNITIES WITH FOUR YEARS OF DATA

846 Households interviewed in 1992, 1993, 1994, and 1995

. 706 Households did not hunt in any year

62 Households hunted in 1 of the 4 years

34 Households hunted in 2 of the 4 years

23 Households hunted in 3 of the 4 years

21 Households hunted in 4 of the 4 years

ST. PAUL (3 YEARS OF DATA)

33 Households interviewed in **1992**, **1994**, and 1995

10 Households did not hunt any year

6 Households hunted in 1 of the 3 years

7 Households hunted in 2 of the 3 years

10 Households hunted in 3 of the 3 years

was 199 households in 1992, 222 households in 1993, 210 households in 1994, and 158 households in 1995. Although fewer people hunted, the percent of hunters who were successful improved in 1995 over the previous year. The percent of hunting households that reported hunting unsuccessfully in 1995 was 26 percent for harbor seal (compared with 29 percent in 1992, 25 percent in 1993, and 37 percent in 1994); the percent of unsuccessful households was 24 percent for sea lion (compared with 30 percent in 1992, 35 percent in 1993, and 40 percent in 1994).

Hunting harbor seal or sea lion is a relatively specialized subsistence activity in Alaska communities. For the four survey years, the large majority of Native households in the study's sampling universe did not attempt to hunt harbor seals or sea lions (Table 13). Among hunters, there also was substantial specialization in productivity (see Figs. 9 and 10). A relatively small number of highly-productive hunters reported taking most of the subsistence kills. The harvests from this core group of highly-productive hunters were distributed among a wider range of households. Specialization has implications for co-management systems. The largest management effects in any region are potentially reached through this group of highly productive subsistence hunters.

There appears to be moderate turnover in hunting households across years, as shown by the unweighted composition of the hunters surveyed all four survey years in Table 14. For harbor seal, there were 139 households that hunted all four years, 126 households that hunted in three of the four survey years, 148 households that hunted in two years, 156 that hunted one year, and 277 households that did not hunt in any year. For sea lion, there were 21 households that hunted all four years, 23 households that hunted in three of the four survey years, 34 households that hunted in two years, 62 that hunted one year, and 706 households that did not hunt in any year. Hunter participation is shown separately for St. Paul, where three years' data are available (Table 14).



Photograph 1. Don Kompkoff, a hunter from Chenega Bay, demonstrates the method of roasting seal meat over an open fire (called *mungyuk*) outside the Tatitlek school. A wind screen has been placed behind to control smoke.

ALUTIIQ USES OF SEA LION AND HARBOR SEAL

Earlier reports have described food products derived from harbor seal and sea lion (cf., Wolfe and Mishler 1993:36-43, 54-59). This section describes some additional detail on two food products prepared by Alutiiq families -- *qiluryat* (braided intestines) and roasted meat prepared over an open fire. The descriptions are based on key respondent interviews and observations by Craig Mishler.

In the Alutiiq culture area of southcentral Alaska, especially in the Gulf of Alaska, braided harbor seal or sea lion intestine (*qiluryat*) is a favorite delicacy, a unique dish distantly resembling pork or beef sausage. Making *qiluryat* is traditionally a woman's culinary skill. In Kodiak Island communities only the older women still remember how to braid, but in the Prince William Sound community of Tatitlek, young boys as well as young girls have recently acquired the skill from their grandmothers (see Photographs 2 and 3). The tradition of braiding intestines is also carried on in the lower Cook Inlet villages of Nanwalek and Port Graham and in communities along the Alaska Peninsula.

In preparing seal or sea lion intestines for braiding, the intestines are first separated from the membrane which encases them. To clean the intestines of their contents, one-inch slits are made with a sharp knife about every three inches along the entire length of the intestine. The contents of the intestine are squeezed out by pressing the intestine between the thumb and forefinger and pulling along its entire length. The intestine is rinsed in clean water and the process of squeezing and rinsing is repeated two more times. Sometimes it is soaked in water and vinegar overnight.

Seal intestines can be braided in two ways -- with or without a strip of fat. Sea lion intestines are braided plain, without a fat strip, because the texture of the fat in a



Photograph 2. Jessie Tiedeman, an elder from Tatitlek, demonstrates the technique of braiding seal intestines with a strip of fat (*qiluryat*) at the Tatitlek school.



Photograph 3. Tanya Totemoff, from Tatitlek, uses the technique of braiding seal intestines without the fat at the Tatitlek school.

sea lion does not lend itself well to braiding. Before being braided with seal intestines, seal blubber is cut into a long continuous narrow strip resembling the letter "s". The length of the fat should match the length of the intestine to which it is braided. The finished braid nearly conceals the fat except on the very end, where it is tied off.

Braiding is done with the thumb and forefinger of the left hand serving as a pedestal or mount which is actively wrapped or woven by intestines manipulated with the right hand (Photograph 2). The precise technique, like tying sailor's knots, is not easily described on paper but is readily learned through demonstration and close observation. Sometimes a piece of rope and some clean rags are used for practice, with the rope substituting for the intestine and the rags representing the strip of fat. Finished plain gut braiding looks something like the pigtails in a schoolgirl's hair (Photograph 3).

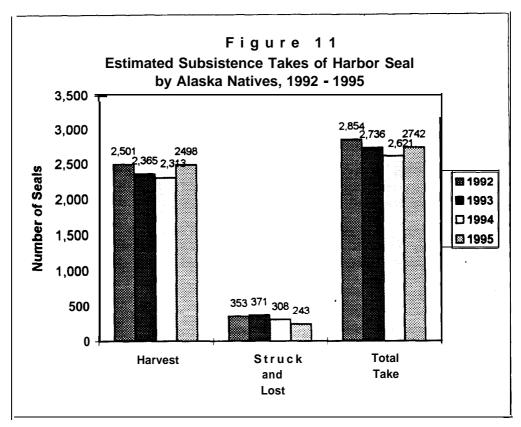
The finished braid, whether with or without fat, is boiled in a pot of water for a couple of hours, then sliced and eaten. Some villagers like to boil the braids with the seal's heart and the kidney, and there are many local variations. In Karluk, people boil *qiluryat* with Worcestershire sauce and onion. In Ivanof Bay, people boil *qiluryat* with salt and serve it with hot mustard. In Akhiok, some families like it sliced cold on sandwiches.

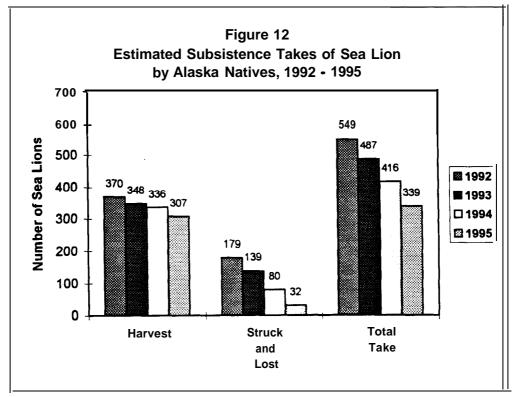
Another favorite food in the Prince William Sound area is roasted harbor seal meat, prepared by *mungyuking* -- an Alutiiq word (*mungyuk*) with an English suffix (-ing). *Mungyuking* is barbecuing freshly killed seal over an open fire, usually by men immediately after they return from hunting. The favorite parts of the seal for roasting are the ribs, but slabs of breast meat are also used. Roasting determines how the seal is butchered. Instead of cutting the seal directly down the middle of the sternum and through the center of the stomach, Alutiiqs in Prince William Sound prefer to make parallel cuts down each side of the seal's rib cage.

To spread the meat open and expose it to the flames, short slender alder branches are poked through the slab in two places and criss-crossed. A much longer and thicker alder branch is then poked through the meat with the base of the branch braced into the ground on an angle, suspending the meat over the fire (Photograph 1). Alder is preferred over other woods because it is green and tends not to bum as fast as other species. To control the direction of the smoke when there is a breeze, a piece of plywood is often propped up on one side of the fire. The fatty side of the ribs or meat is roasted first. When this side is done, the slab is turned over to roast the meaty side. The ribs and meat are considered done after they turn black from the heat and smoke, which takes several hours and imparts a rich charcoal flavor. A good *mungyuk* requires tending the meat constantly to insure that it does not flame up and bum to a crisp.

Besides the breast meat and ribs, the liver and kidney of the seal are also roasted over the fire in a shish kabob style. That is, a piece of liver is skewered onto a stick, followed by a piece of fat, followed by a piece of kidney, another piece of fat, and so on. Yet another variation is to smoke the seal lightly on a stick, then wrap it in tinfoil and set it on top of hot coals. This way it will hold its juices and will not dry out.

Mungyuking is a cause for family and community celebration, especially during summer months when people love to gather on the beach in front of a bonfire to eat, drink coffee, tell stories, and socialize long into the evening. It is fair to say that foodways such as mungyuk and qiluryat are important markers of Alutiiq social and ethnic identity, and that they connect the essential nutritional value of marine mammals with the continuity of traditional culture.

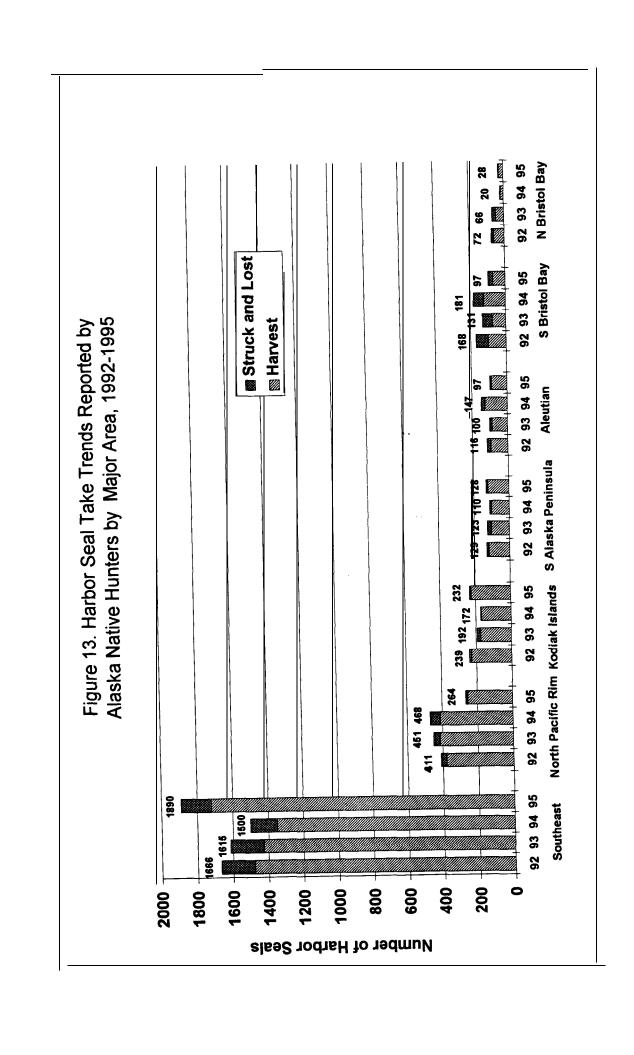


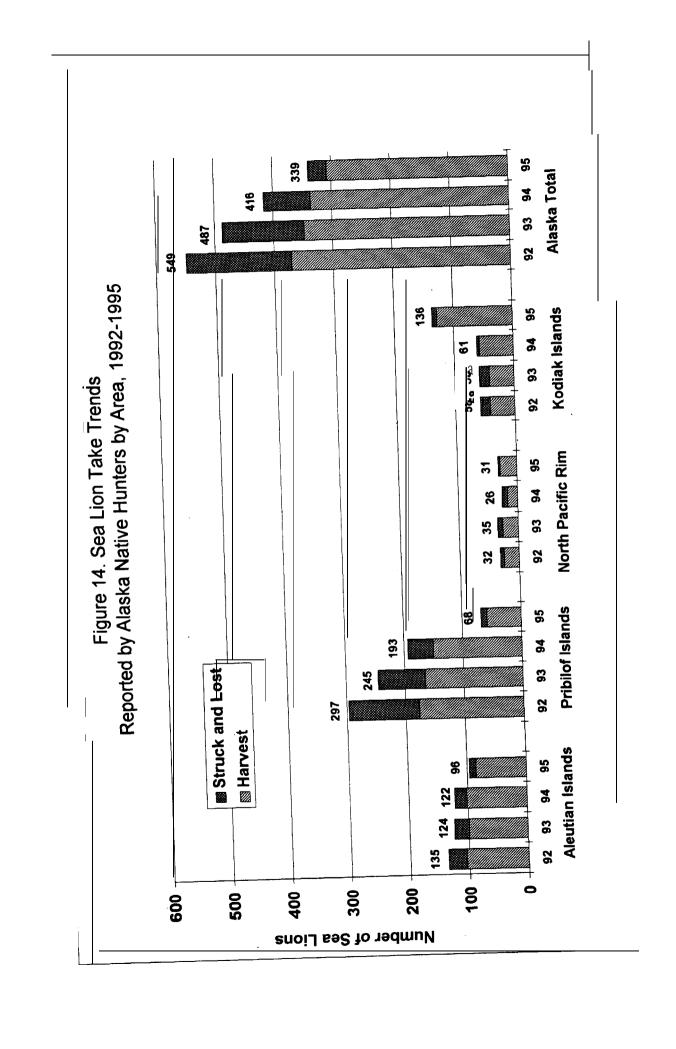


DISCUSSION

At the state level, harbor seal takes increased in 1995 after two consecutive years of declines: harbor seal harvests (2,498 seals) and total takes (2,742 seals) in 1995 were the second highest recorded since surveys were started in 1992 (Fig. 11). In addition, hunters reported the lowest number of struck and lost animals (243 seals) in 1995, continuing an apparent declining trend in struck and lost rates for harbor seals -- 12.4 percent (1992), 13.6 percent (1993), 11.8 percent (1994), and 8.9 percent By contrast, sea lion takes continued to decline at the statewide level -- 549 (1995).(1992), 487 (1993), 416 (1994), and 339 (1995), representing a 38.3 percent decline in subsistence takes over a four-year period (see Fig. 12). The subsistence take of sea lions in 1995 was the lowest recorded since surveys started in 1992. A large portion of the decline in total sea lion takes is attributable to declining numbers of struck and lost animals reported by hunters -- 179 (1992), 139 (1993), 80 (1994), and 32 (1995). Similar to harbor seals, struck and lost rates for sea lions have shown marked declines since 1992 -- 32.6 percent (1992), 28.6 percent (1993), 19.2 percent (1994), and 9.5 percent (1995). Not counting struck and lost animals, sea lion harvests have shown a more modest decline of 17.0 percent since 1992 (from 370 to 307 animals) at the statewide level.

As stated in last year's report, the reasons for declining struck and lost rates for harbor seal and sea lion are uncertain. It is possible that hunting conditions generally have been more favorable for retrieving animals since 1992; however, we have not heard this mentioned by hunters. There are few indications that hunters in general have been more reluctant to report struck and lost animals over time to local surveyors, though it is quite possible that this may be the case for some individual hunters. Similarly, there are no indications that local surveyors are not consistently asking the struck and lost questions on the surveys, though this also may be possible in a few





cases. We do know that in general, hunters are increasingly aware of the reports about declining harbor seal and sea lion populations in portions of their ranges in Alaska. It is possible that some hunters are modifying hunting methods in order to ensure better retrieval as a response to the reported population declines, such as taking closer shots, or shooting where water and wind conditions make retrieval more likely. While a few hunters have told surveyors that they are making adjustments like these, we have not gathered any systematic information to know the extent of this generally among hunters. As stated in last years report, hunting guidelines were developed and disseminated on St. Paul and St. George by local hunter organizations,' which may have sensitized hunters there to these matters. The declines in reported struck and lost rates for harbor seal and sea lion statewide may be a result of a combination of factors like these.

With only four years of harvest information, it is difficult to identify "harvest trends" within what may-be a normal pattern of yearly variation in subsistence uses of a region or community. We do not know what might constitute a "high", "low", or "average" year for a community until there is a series of years for comparison. Variation in takes at the regional level are depicted in Figs. 13 and 14 and Table 15. No general statements can be made about harvest changes that would apply to all regions. Some region's harvests were higher in 1995, while others were lower. It is likely that most of these changes represent normal variation in yearly subsistence takes, and represent fluctuations due to seasonal hunting conditions, local food needs, local prey abundance, and personal circumstances of marine mammal hunters.

For instance, harbor seal takes and harvests in southeast Alaska in 1995 were the largest recorded since the project began in 1992. The productive year was due primarily to substantially larger seal takes at Yakutat (695 seals in 1995, compared with 452 seals in 1994) and Klawock (264 seals in 1995, up from 71 seals in 1994). As stated above, high harvesters account for a large portion of the harvest in communities

Table 15 Subsistence Harbor Seal and Sea Lion Takes by Alaska Natives By Region, 1992, 1993, 1994, and 1995

		1992	1992		1993	1993		1994	1994		1995	1995
	1992	Harbor	Total	1993	Harbor	Total	1994	Harbor	Total	1995	Harbor	Total
	Harbor	Seal	Harbor									
	Seal	Struck	Seal									
Region	Harvested	and Lost	Take									
Southeast Alaska	1476.8	189.5	1666.2	1425.0	190.0	1615.0	1348.5	151.4	1499.9	1719.1	170.9	1890.0
North Pacific Rim	377.6	33.4	411.0	412.3	38.5	450.8	411.2	56.8	468.0	252.1	11.7	263.9
Upper Kenai-Cook Inlet	51.6	0.0	51.6	49.2	5.6	54.8	16.2	0.0	16.2	3.7	0.0	3.7
Kodiak Island	225.5	13.1	238.6	171.7	20.1	191.8	168.2	3.6	171.7	223.0	9.2	232.2
South Alaska Peninsula	115.5	13.1	128.6	100.0	23.1	123.1	98.6	11.1	109.8	117.0	11.1	128.0
Aleutian Islands	94.3	21.4	115.7	85.0	15.4	100.4	124.9	22.6	147.5	86.9	9.7	96.6
Pribilof Islands	2.3	1.2	3.5	2.3	1.2	3.5	7.3	0.0	7.3	2.5	0.0	2.5
South Bristol Bay	0.66	989	167.6	73.6	57.3	130.9	121.6	59.3	180.9	68.3	28.3	9.96
North Bristol Bay	58.4	13.2	71.6	46.1	20.0	66.1	16.2	3.3	19.5	25.9	2.4	28.3
Alaska Total	2501.0	353.4	2854.4	2365.3	371.1	2736.4	2312.8	308.0	2620.8	2498.5	243.3	2741.8
		1992	1992		1993	1993		1994	1994		1995	1995
	1992	Sea	Total	1993	Sea	Total	1994	Sea	Total	1995	Sea	Total
	Sea	Lion	Sea									
	Lion	Struck	Lion									
Region	Harvested	and Lost	Take									
Southeast Alaska	5.2	1.3	6.4	0.0		1.1	3.5	1.1	4.6	0.0	0.0	0.0
North Pacific Rim	25.1	6.5	31.5	26.2	8.7	34.9	16.6	9.7	26.3	28.4	3.0	31.4
Upper Kenai-Cook Inlet	5.7	3.8	9.5	7.8	3.3	11.1	4.	0.0	1.4	0.0	0.0	0.0
Kodiak Island	41.5	16.3	57.8	41.5	16.9	58.4	57.1	4.2	61.3	127.9	7.7	135.7
South Alaska Peninsula	2.4	0.0	2.4	4.6	1.2	5.7	4.6	Ξ	5.7	8.1	0.0	8.1
Aleutian Islands	104.3	30.9	135.2	99.0	24.8	123.8	101:8	20.5	122.3	82.0	1.1	96.1
Pribilof Islands	176.6	120.2	296.8	165.4	80.0	245.4	149.8	43.5	193.3	57.6	10.3	67.9
South Bristol Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Bristol Bay	7.8	0.0	7.8	3.3	3.3	6.5	1.2	0.0	1.2	0.0	0.0	0.0
Lake Iliamna	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alaska Total	369.8	178.9	548.8	347.8	139.3	487.1	336.0	90.1	416.1	307.1	32.1	339.2

Table 16 Subsistence Harbor Seal Takes by Alaska Natives By Community, 1992, 1993, 1994, and 1995

		1992	1992	I	1993	1993	ĺ	1994	1994		1995	1995
	1992	Harbor	Total	1993	Harbor	Total	1994	Harbor	Total	1995	Harbor	Total
	Harbor	Seal	Harbor	Harbor	Seal	Harbor	Harbor	Seal	Harbor	Harbor	Seal	Harbor
	Seal	Stuck	Seal	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal
Community	Harvested	and Lost	Take	iarvested a	and Lost	Take	larvested	and Lost	Take	larvested a	and Lost	Take
SOUTHEAST ALASK	Ά											
Angoon	125.1	28.9	154.0	56.6	9.9	66.5	66.9	21.1	88.0	60.9	9.7	90.6
Craig	74.2	0.0	74.2	51.1	9.8	60.9	42.7	6.8	49.3	69.4	13.6	83.1
Haines	30.5	7.9	38.4	23.0	2.3	25.3	39.3	2.2	41.5	24.0	9.0	33.0
Hoonah	350.2	24.8	375.0	324.4	35.8	360.2	240.7	15.0	255.8	236.6	19.7	256.3
Hydaburg	30.0	2.1	32.1	14.0	0.0	14.0	10.0	0.0	10.0	6.5	0.0	6.5
Juneau	122.6	7.6	130.2	59.0	21.6	80.6	78.6	13.5	92.1	42.9	1.3	44.2
Kake	173.9	12.3	186.2	100.8	15.2	115.9	99.3	7.4	108.6	72.0	1.5	73.5
Kasaan	0.0	0.0	0.0									
Ketchikan	90.2	6.5	96.8	42.4	2.9	45.3	31.4	0.0	31.4	46.4	0.0	46.4
Klawock	39.0	1.4	40.3	39.8	0.0	39.8	71.1	0.0	71.1	263.8	0.0	263.8
Klukwan	8.0	2.0	10.0	1.2	0.0	1.2	3.8	1.3	5.0	35.2	6.4	41.6
Metlakatla	1.3	0.0	1.3									
Pelican	8.3	1.4	9.7	5.3	1.1	6.4	4.4	1.1	5.6	13.5	0.0	13.5
Petersburg	22.4	2.6	25.0	4.5	4.5	9.0	15.2	1.3	16.4	13.6	1.1	14.7
Saxman	22.2	1.2	23.5	5.6	0.0	5.8	16.5	0.0	16.5	15.9	0.0	15.9
Sitka	124.7	21.4	146.1	109.3	20.6	129.9	110.5	20.1	130.6	93.8	6.3	100.0
Wrangell	6.0	8.0	14.0	19.5	9.0	28.5	101.0	27.0	128.0	89.3	22.8	112.0
Yakutat	248.0	61.3	309.3	568.4	51.4	625.8	417.1	35.0	452.1	615.5	79.6	695.1
NORTH PACIFIC RIM			_									
Chenega Say	42.6	2.3	44.9	60.8	2.2	63.0	42.0	3.9	45.9	44.4	1.6	46.0
Cordova	103.8	8.8	112.5	147.4	5.5	152.9	135.8	9.1	144.9	83.4	2.0	85.4
Nanwalek	27.9	0.0	27.9	33.9	3.2	37.1	29.0	4.8	33.7	23.6	0.0	23.6
Port Graham	36.2	4.7	40.8	30.6	3.2	33.7	15.5	5.2	20.7	23.0	0.0	23.0
Seldovia	12.4	0.0	12.4	7.9	4.9	12.8	8.0	0.0	8.0	4.0	0.0	4.0
Seward	2.0	0.0	2.0	0.0	0.0	0.0	5.0	0.0	5.0	10.9	5.5	16.4
Tatitlek	152.9	17.7	170.6	110.8	15.5	126.4	145.9	30.9	178.8	46.1	2.6	46.7
Valdez	0.0	0.0	0.0	21.0	4.0	25.0	30.0	3.0	33.0	16.8	0.0	16.8
UPPER KENAICOOK	INLET											
Anchorage	17.1	0.0	17.1	24.4	5.6	30.0	4.2	0.0	4.2	3.7	0.0	3.7
Homer				4.8	0.0	4.6	12.0	0.0	12.0	0.0	0.0	0.0
Kenai	33.3	0.0	33.3	20.0	0.0	20.0						
Tyonek	1.1	0.0	1.1				_		_	_		
KODIAK ISLAND												
Akhiok	20.0	3.0	23.0	13.3	0.0	13.3	14.5	0.0	14.5	5.0	0.0	5.0
Karluk	16.5	1.5	18.0	10.0	1.3	11.3	7.5	0.0	7.5	28.1	6.8	34.9
Kodiak City	36.9	0.0	36.9	6.0	1.0	7.0	7.6	0.0	7.6	8.8	0.0	8.8
Larsen Bay	6.5	0.0	6.5	7.7	5.5	13.2	13.4	2.2	15.7	11.0	0.0	11.0
Old Harbor	86.8	5.3	92.1	67.6	2.7	70.3	83.7	1.3	85.0	112.0	2.4	114.4
Ouzinkie	21.8	1.1	23.0	41.2	8.7	49.8	33.4	0.0	33.4	56.1	0.0	56.1
Port Lions	36.9	2.2	39.1	26.0	1.0	27.0	8.0	0.0	8.0	2.0	0.0	2.0

Table 16, (Continued)
Subsistence Harbor Seal Takes by Alaska Natives
By Community, 1992, 1993, 1994, and 1995

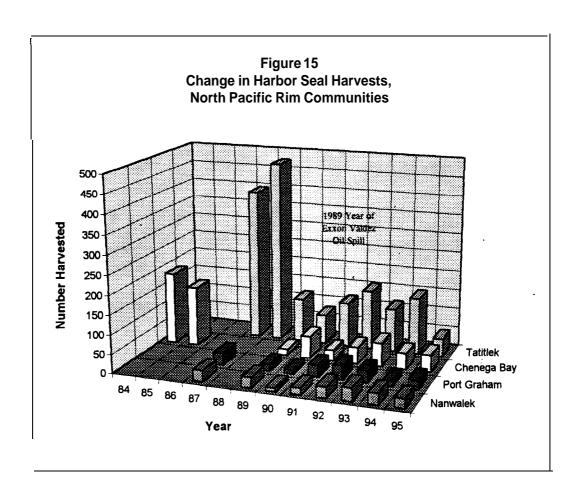
		1992	1992		1993	1993	1	1994	1994		1995	1995
	1992	Harbor	Total	1993	Harbor	Total	1994	Harbor	Total	1995	Harbor	Total
	Harbor	Seal	Harbor	Harbor	Seal H	Harbor	Harbor	Seal I	Harbor	Harbor	Seal	Harbor
	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal	Seal	Struck	Seal
Community	Harvested	and Lost	Take	larvested	and Lost	Take	larvested	and Lost	Take	iarvested	and Los	t Take
SOUTH ALASKA F	PENINSULA											
Chignik Bay	2.4	1.2	3.6	6.3	5.0	11.3	3.4	0.0	3.4	0.0	0.0	0.0
Chignik Lagoon	4.0	0.0	4.0	4.3	1.1	5.3	0.0	1.0	1.0	0.0	0.0	0.0
Chignik Lake	8.3	2.1	10.3	15.2	5.5	20.8	20.8	1.3	22.1	3.2	1.1	4.3
False Pass	18.0	0.0	18.0	19.0	0.0	19.0	12.6	2.1	14.7	25.9	1.2	27.1
Ivanof Bay	10.0	1.0	11.0	16.3	4.7	21 .0	12.0	, 1.3	13.3	18.7	2.7	21.3
King Cove	26.0	6.7	32.7	12.8	3.5	16.3	20.9	1.1	22.0	49.0	3.0	52.0
Nelson Lagoon	0.0	0.0	0.0									
Perryville	8.9	2.2	11.1	12.6	2.1	15.0	21.1	0.0	21. 1	11.0	3.1	14.1
Sand Point	37.9	0.0	37.9	13.3	1.2	14.4	7.8	4.3	12.1	9.2	0.0	9.2
ALEUTIAN ISLAND	S											
Akutan	12.9	4.3	17.1	15.6	4.5	20.1	13.8	3.5	17.3	7.0	. 0.0	7.0
Atka	28.6	9.9	38.5	32.7	0.0	32.7	73.7	8.7	82.3	42.5	0.0	42.5
Nikolski	5.8	3.5	9.3	4.0	1.0	5.0	6.0	0.0	6.0			
Unalaska	47.0	3.7	50.8	32.7	9.9	42.6	31.4	10.5	41.8	37.4	9.7	47.1
PRIBILOF ISLANDS	S											
St. George	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Paul	2.3	1.2	3.5	2.3	1.2	3.5	7.3	0.0	7.3	2.5	0.0	2.5
SOUTH BRISTOL E	ВАҮ											
Egegik	3.3	14.3	17.7	7.7	3.3	11.0	12.8	0.0	12.8	1.4	0.0	1.4
KingSalmon	10.2	0.0	10.2	21.3	10.7	32.0	17.0	4.5	21.5	13.0	3.0	16.0
Levelock	10.8	0.0	10.6	2.7	5.4	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Naknek	26.6	7.0	33.6	2.7	0.0	2.7	21.4	8.3	29.7	34.8	15.3	50.2
Pilot Point	5.4	4.3	9.7	2.2	0.0	2.2	3.1	0.0	3.1	0.0	0.0	0.0
Port Heiden	40.5	36.0	76.5	30.7	19.9	50.6	63.0	45.3	108.3	17.0	10.0	27.0
South Naknek	2.3	6.9	9.2	6.4	18.0	244	4.4	1.1	5.5	2.1	0.0	2.1
NORTH BRISTOL I	BAY											
Aleknagik	0.0	3.6	3.6	0.0	0.0	0.0	0.0	3.3	3.3	0.0	0.0	0.0
Clark's Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dillingham	29.2	3.8	32.9	18.0	4.2	22.2	16.2	0.0	16.2	13.3	0.0	13.3
Manokotak	4.9	3.8	8.7	3.2	0.0	3.2	0.0	0.0	0.0	9.3	2.4	11.7
Togiak	24.3	2.0	26.3	24.9	15.8	40.7	0.0	0.0	0.0	3.3	0.0	3.3

Table 17
Subsistence Sea Lion Takes by Alaska Natives
By Community, **1992**, **1993**, **1994**, and 1995

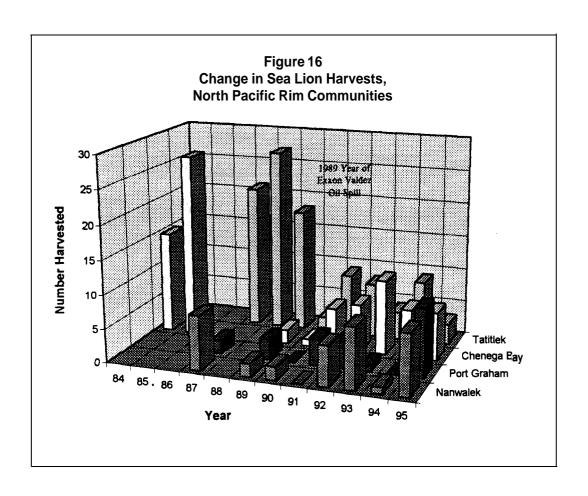
		1992	1992		1993	1993	1	1994	1994		1995	1995
	1992	sea	Total	1993	Sea	Total	1994	Sea	Total	1995	Sea	Total
	Sea	Lion	Sea	Sea	Lion	Sea	Sea	Lion	Sea	Sea	Lion	Sea
	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion
	rvested a	and Lost	Take	arvested	and Lost	Take	larvested a	nd Lost	Take	larvested a	and Lost	Take
SOUTHEAST ALASKA												
Angoon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Craig	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hoonah	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hydaburg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Juneau	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Kake	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
Kasaan	0.0	0.0	0.0									
Ketchikan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Klawock	1.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Klukwan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metlakatla	0.0	0.0	0.0									
Pelican	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petersburg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saxman	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sitka	3.8	1.3	5.0	0.0	1.1	1.1	1.1	1.1	2.2	0.0	0.0	0.0
Wrangell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yakutat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH PACIFIC RIM												
Chenega Bay	6.9	1.2	8.1	11.1	6.6	17.7	6.6	0.0	6.6	6.6	0.0	6.6
Cordova	0.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	1.0	1.0
Nanwalek	6.3	0.0	6.3	8.5	1.1	9.5	1.2	2.3	3.5	9.2	0.0	9.2
Port Graham	3.5	1.2	4.7	1.1	0.0	1.1	0.0	0.0	0.0	10.0	2.0	12.0
Seldovia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Seward	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tatiilek	8.3	4.2	12.5	4.1	1.0	5.2	8.8	7.4	16.2	2.6	0.0	2.6
Valdez	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UPPER KENAI-COOK I												
Anchorage	5.7	3.8	9.5	7.8		11.1	1.4	0.0	1.4	0.0	0.0	0.0
Homer				0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kenai	0.0	0.0	0.0	0.0	0.0	0.0				-		-
Tyonek	0.0	0.0	0.0							-	~	
KODIAK ISLAND												
Akhiok	3.0	1.0	4.0	0.0		0.0	3.2	0.0	3.2	1.0	1.0	2.0
Karluk	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kodiak City	0.0	0.0	0.0	0.0		12.7	1.1	0.0	1.1	2.2	0.0	2.2
Larsen Bay	1.1	0.0	1.1	0.0		0.0	2.2	0.0	2.2	2.0	1.0	3.0
OM Harbor	32.9	13.2	46.1	32.1		33.2	46.2	1.3	47.5	107.1		112.9
Ouzinkie	3.4	0.0	3.4	5.		7.6	4.4	2.9	7.3	15.6	0.0	15.6
Port Lions	1.1	2.2	3.3	4.0	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 17, (Continued)
Subsistence Sea Lion Takes by Alaska Natives
By Community, **1992**, **1993**, **1994**, and 1995

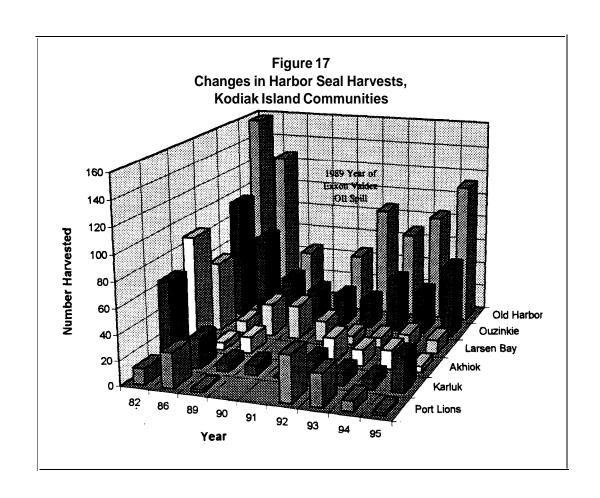
		1992	1992	ĺ	1993	1993		1994	1994		1995	1995
	1992	Sea	Total	1993	Sea	Total	1994	sea	Total	1995	Sea	Total
	sea	Lion	Sea	Sea	Lion	Sea	sea	Lion	Sea	Sea	Lion	Sea
	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion	Lion	Struck	Lion
Community	Harvested	and Lost	Take	arvested	and Lost	Take	arvested	and Lost	Take	arvested	and Lost	Take
SOUTH ALASKA P	PENINSULA											
Chignik Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chignik Lagoon	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Chignik Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fake Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ivanof Bay	0.0	0.0	0.0	2.3	1.2	3.5	0.0	0.0	0.0	0.0	0.0	0.0
King Cove	1.3	0.0	1.3	1.2	0.0	1.2	3.2	1.1	4.3	5.0	0.0	5.0
Nelson Lagoon	0.0	0.0	0.0									
Perryville	1.1	0.0	1.1	0.0	0.0	0.0	1.4	0.0	1.4	3.1	0.0	3.1
Sand Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALEUTIAN ISLAND	S											
Akutan	25.7	4.3	30.0	14.5	8.9	23.4	12.7	3.5	16.2	6.0	0.0	6.0
Atka	28.6	9.9	38.5	25.1	0.0	25.1	45.5	8.7	54.2	40.0	0.0	40.0
Nikolski	8.2	0.0	8.2	6.0	0.0	6.0	0.0	0.0	0.0			
Unalaska	41.8	16.7	58.5	53.4	15.9	69.3	43.6	8.4	51.9	39.0	11.1	50.1
PRIBILOF ISLANDS												
St. George	14.9	55.0	69.9	3.7	14.8	18.6	2.8	17.1	19.9	4.0	4.0	8.0
St. Paul	161.7	65.2	228.8	161.7	65.2	226.8	147.0	26.4	173.4	53.6	6.3	59.9
SOUTH BRISTOL E												
Egegik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
King Salmon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Levelock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Naknek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pilot Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Port Heiden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Naknek	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH BRISTOL E												
Aleknagik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clark's Point	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dillingham	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manokotak	3.9	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togiak	3.9	0.0	3.9	3.3	3.3	6.5	1.2	0.0	1.2	0.0	0.0	0.0
LAKE ILIAMNA												
Iliamna	1.3	0.0	1.3									
Newhalen	0.0	0.0	0.0				ĺ					



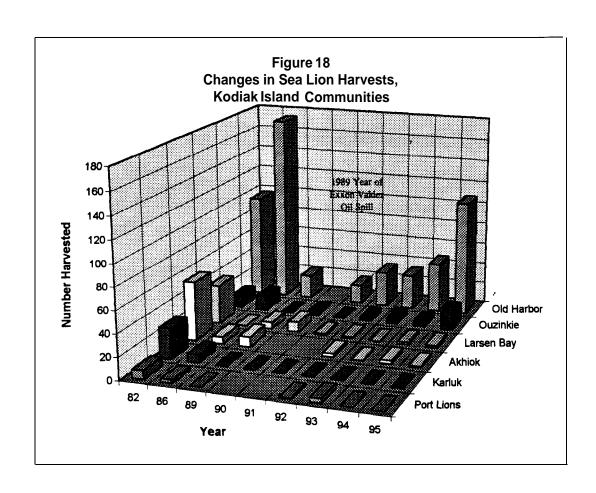
	HAR	BOR SEAL HAF	RVESTS	
Year	Nanwal ek	Port Graham	Chenega Bay	Tatitlek
84			186	
85			154	
86				
87	29	32		393
88				473
89	27	17	16	113
90	9	10	57	76
91	18	30	28	114
92	28	36	43	153
93	34	31	61	111
94	29	16	42	146
95	24	23	44	46



	SI	EA LION HARV	ESTS	
Year	Nanwal ek	Pon Graham	Chenega	Bay Tatitlek
84			15	
85			27	
86				
87	8	2		21
88				27
89	2	3	2	18
90	2	0	1	2
91	0	4	6	9
92	6	4	7	8
93	9	1	11	4
94	1	0	7	9
95	9	10	7	3



HARBOR SEAL HARVESTS									
	Port Lions	Karl uk	Akhi ok	Larsen Bay	0uzi nki e	Old Harbor			
82	13	66	89	56	96	158			
86	28	24	6	10	67	127			
89	2	7	13	26	34	45			
90		8		27	26				
91		1		17	24	46			
92	37	17	20	7	22	87			
93	26	10	13	8	41	68			
94	8	8	15	13	33	84			
95	2	28	5	11	56	112			



	SEA LION HARVESTS									
	Port Li ons	Karl uk	Akhi ok	Larsen Bay	0uzi nki e	Old Harbor				
82	8	27	54	36	11	96				
86	3	7	6	0	13	173				
89	0	0	9	6	0	22				
90		0		9	3					
91		0		1	0	17				
92	1	0	3	1	3	33				
93	4	0	0	0	5	32				
94	0	0	3	2	4	46				
95	0	0	1	2	16	107				

like Yakutat and Klawock. Community totals are sensitive to the hunting activities of a small number of hunters. In Klawock there have been two highly productive hunters producing the majority of seals for the community in recent years; they both had larger takes in 1995 compared with previous years. The reasons for increases or decreases in seal takes in communities like Yakutat and Klawock are undoubtedly determined in part by the individual circumstances of the community's highly productive hunters. As stated above, the seal takes documented at Yakutat and Klawock in 1995 may fall within the normal range of variation of subsistence harvests for the communities.

For harvests in two regions -- the North Pacific Rim and Kodiak Island -- a longer time series is available, shown as Figures 15-18 (struck and lost numbers are not available prior to 1992). In the North Pacific Rim, subsistence harvests of harbor seal increased between 1992 and 1994, reflecting a rebound of subsistence hunting following the depression of subsistence activities triggered by the *Exxon Valdez* oil spill in Prince William Sound in 1989. Families reduced their subsistence activities the year of the spill because of the uncertainties of the health safety of consuming wild foods harvested from oiled areas. Subsistence harvest levels have shown signs of recovery since the spill, although seal harvests have not returned to prespill levels in Chenega Bay and Tatitlek (Fig. 15). Total seal harvests in the North Pacific Rim fell in 1995, due primarily to a decreased harvest at Tatitlek (Fig. 15). Sea lion harvests have been more stable over the last four years for the area, compared with harbor seal (Fig. 16)

In the Kodiak Island area, seal harvests in 1995 (214 seals) were lower than those recorded a decade before -- 478 seals in 1982 and 262 seals in 1986 (Fig. 17). Sea lion harvests in 1995 (126 sea lions) were also lower than recent historic levels -- 232 sea lions in 1982 and 202 sea lions in 1986 (Fig. 18). In this case, sea lion and harbor seal harvests appear to have been declining during the 1980s, but have been increasing again during the 1990s at Old Harbor and Ouzinkie. In four other communities, harvests have remained low and somewhat variable during the 1990s.

While the harvests in 1995 at Old Harbor and Ouzinkie were the largest documented since 1992, they have not yet matched harvest levels recorded during the early 1980s.

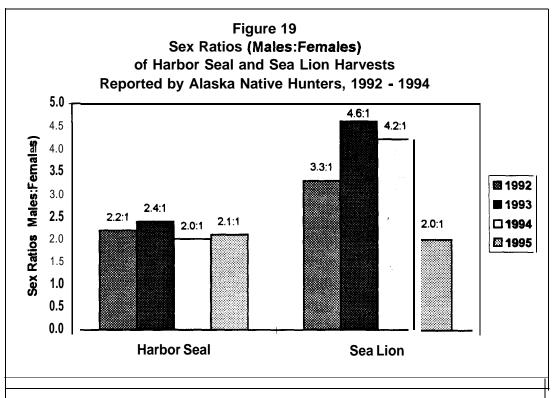
At the regional level, the most notable apparent trends are the declines in sea lion takes on the Pribilof Islands (Fig. 14), where total reported sea lion takes have fallen from 297 to 68 animals between 1992 to 1995 (a 77.1 percent decrease). Reported sea lion harvests on the Pribilof Islands have declined from 177 to 58 animals between 1992 to 1995 (a 67.4 percent decrease) (see Appendix B, Table 7). The largest reduction in harvests occurred in 1995, when harvests fell to 58 animals from 150 in 1994. The percentage of households who reported hunting sea lion during the survey year also has declined on St. Paul: 57.1 percent of households (1992), 35.3 percent (1994), and 21.7 percent (1995) (there was no survey in 1993).

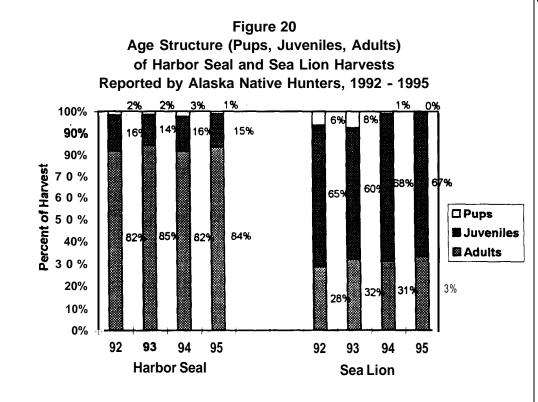
There are probably a number of factors related to the declining subsistence harvests of sea lions on the Pribilof Islands between 1992 and 1995. Hunters attending the Pribilof Islands Joint Management Board in August 1996 stated that ice conditions in the winters of 1994-95 and 1995-96 were responsible in part for the large single-year decline in sea lion harvests during calendar year 1995. In both winters, the Bering Sea ice pack moved more to the south than usual. Pack ice surrounded portions of St. Paul and St. George islands during winter and spring, a relatively atypical event in recent years. Hunters reported that the ice pack pushed sea lion groups away from the islands. There were fewer groups of sea lions passing by the islands because there was less open water. Only a few sea lions were seen among the leads and floes. These ice conditions probably account for the substantial drop in reported harvests during 1995. Increased seasonal employment was a second factor mentioned by the Pribilof Islands Joint Management Board. Some hunters on St. Paul and St. George may have hunted less in 1995 because of relatively more employment on airport construction projects during winter and spring. Some hunters may have

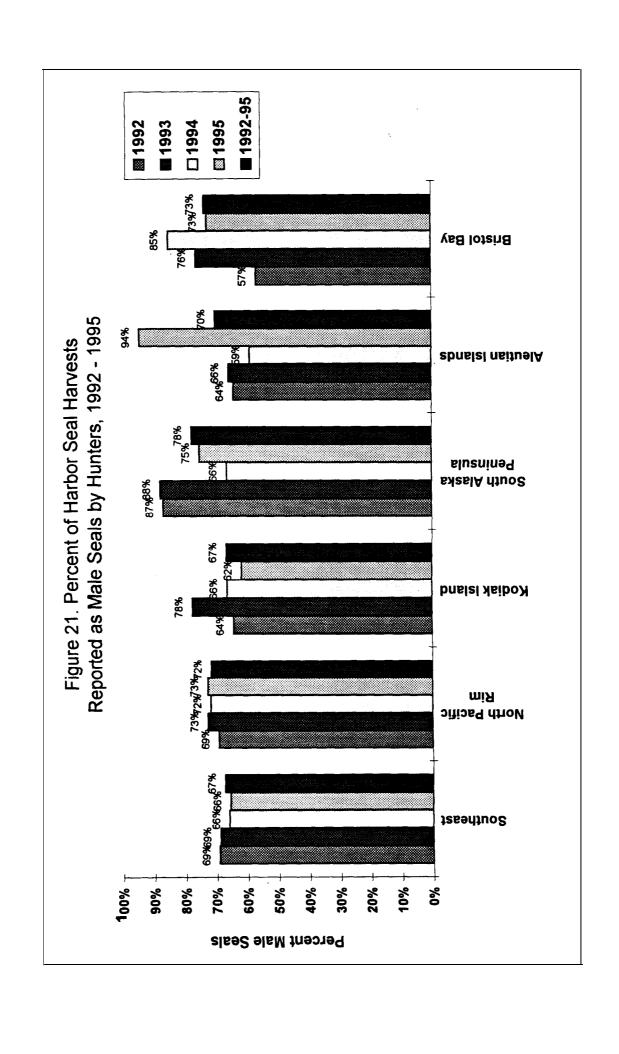
reduced their time hunting sea lions from the bluffs evenings and weekends because of the longer hours of seasonal employment.

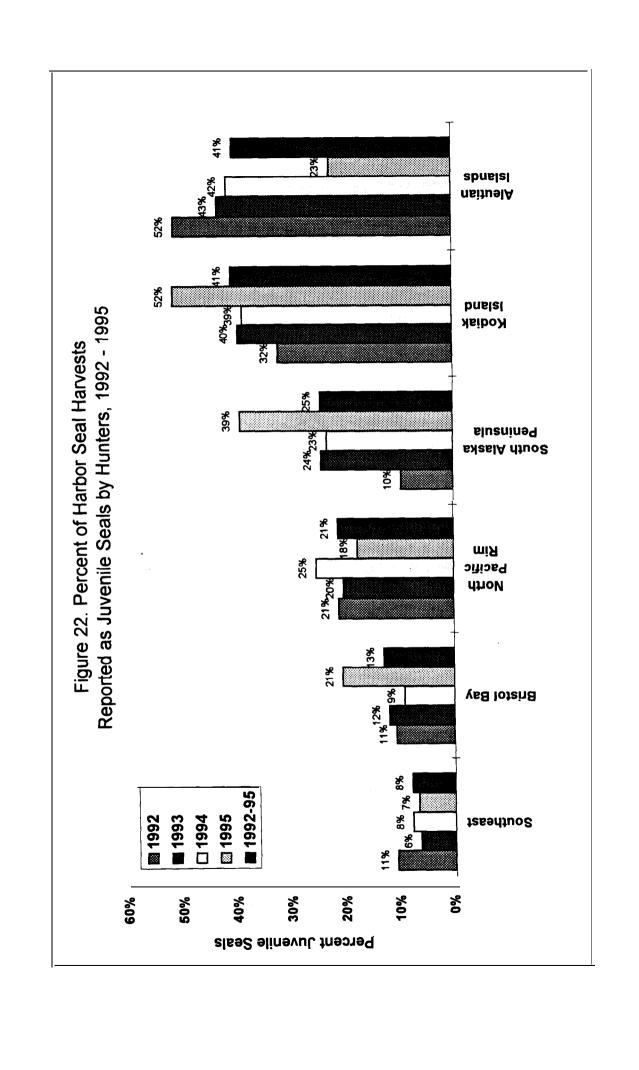
Figures 19 and 20 compare statewide patterns in the age and sex composition of the subsistence harvests of harbor seals and sea lions over the four year survey period. At the statewide level, hunters continued to report harvesting more male than female harbor seals in 1995. Considering kills of known sex, male to female sex ratios have been similar between all four survey years for harbor seal (2.2 to 1 in 1992, 2.4 to 1 in 1993, 2.0 to 1 in 1994, and 2.1:1 in 1995) (see Fig. 19). For sea lion, male to female sex ratios in 1995 unaccountably declined from previous years (3.3 to 1 in 1992, 4.6 to 1 in 1993, 4.2 to 1 in 1994, and 2.0:1 in 1995). At the statewide level, age composition is relatively similar between years (Fig. 26): hunters continued to report harvesting primarily adult harbor seals and primarily juvenile sea lions.

Figures 21 and 22 compare composition data for harbor seals at the regional level. There is considerable similarity between regions and years for harbor seal sex composition, shown in Fig. 21. Counting all harvested animals whose sex was reported between 1992-95, the regions all showed more males to females harvested -- Southeast (67 percent males), North Pacific Rim (72 percent males), Kodiak Island (67 percent males), South Alaska Peninsula (78 percent males), Aleutian Islands (70 percent males), and Bristol Bay (73 percent males; this combines north and south Bristol Bay to increase the number of observations). Why substantially more males than females are consistently taken across years and regions is an interesting question, when it is probably the case that slightly more females than males are present in the general harbor seal population (Hoover 1988: 129-130). Some hunters report a selection preference for males over females when hunting during late spring through summer, to avoid taking females carrying large fetuses or nursing pups (Wolfe et al. 1994). The higher number of males harvested also probably reflects the greater proportion of males in the groups of animals available to hunters. In some areas,









hunters report that groups of males segregate from females during the year -- older males are found feeding outside of bays while females and their young are found feeding in shallower inside waters (Wolfe et al. 1994). The greater proportion of harvested males may reflect the sex composition of segregated seal groups which hunters encounter. In addition, in some hunting contexts, hunters select a seal swimming among groups of animals reacting to the presence of the hunter. In these situations, female seals as a whole may be more cautious than male seals when disturbed, presenting comparatively fewer or more difficult targets. More information from expert hunters about local hunting patterns and seal ecology may untangle the relative importance of these factors. Whatever the particular mix of variables influencing sex composition, the predominance of males over females in the subsistence harvest of harbor seals is fairly consistent across regions and years.

By contrast, the age composition of the subsistence harvest of harbor seals varies substantially between regions and present a more complex puzzle (Fig. 22). Since 1992, hunters have been asked to classify the seal harvest into three categories -- "pups", "juveniles", and "adults". Probably most hunters answer this question using size and behavior as main indicators, so that the smallest seals with their mothers are classified as "pups", small-sized seals are classified as "juveniles", and medium to large seals are classified as adults. The hunters' category of "juveniles" probably includes yearlings (6 - 17.9 months), which are about 30 percent of adult weight, and perhaps include some 2-year-old seals (18 - 29.9 months) and 3-year-old seals (30 - 41.9 months), which have gained on average about 50 percent of adult weight (Bigg 1969: 21; Pitcher and Caulkins 1979:30). Based on hunter reports, the percent of adults and juveniles differed markedly between regions (Fig. 22). Of all the seals harvested between 1992-95 in the Southeast Region, only 8 percent were juvenile seals. This differs substantially from harvests in the Kodiak Islands and the Aleutian Islands -- in each region, 41 percent of harvested seals were reported to be juvenile seals during

1992-95. The age composition of harvests for the North Pacific Rim (21 percent juveniles) and the South Alaska Peninsula (25 percent juveniles) fall between the Southeast and Kodiak-Aleutian regions. The age composition from Bristol Bay (13 percent juveniles) is most similar to that from the Southeast Region.

Factors that may affect regional age compositions include preferences by hunters for juveniles or adults, the age composition of seal groups which are hunted, and the age composition of the regional seal population. There is little to suggest that hunter preferences could account for such large differences between regions. Some hunters report preferences for small or medium-sized seals because the meat is more tender, the skins are in better condition, and they are easier to handle in a skiff. Other hunters declare a preference for larger seals for greater yields of oil and meat or larger skins. However, these types of preferences have been mentioned by some hunters in all regions and are not thought to vary substantially between regions. It is possible that there are regional differences in the behavior of juvenile seals that make them more susceptible to being taken by hunters of some regions; however, we do not know what those behavioral features might be. While age segregation occurs within seal groups according to hunters, we have no information to suggest that patterns of age segregation differs substantially between regions to account for the regional differences in age composition of the harvest.

The regional differences in age composition of harvested seals most likely reflect differences in the age composition of regional seal populations in Alaska. That is, hunters in the Kodiak Islands and Aleutian Islands are encountering seal groups with a greater proportion of small, young seals than are hunters in Southeast Alaska. Under these circumstances, more small, young seals are being harvested.

Little published information exists on the age composition of North Pacific harbor seal populations, and the few scientific collections are relatively old and were subject to sampling biases at the time they were collected (Hoover 1988:130). Based

on a sample of seals taken in British Columbia in 1964-68 (245 seals), the population was estimated to contain 20.7 percent pups (less than 6 months of age), 18.8 percent yearlings, 10.4 percent 2-year-olds, 8.7 percent 3-year-olds, 8.7 percent 4-year-olds, and 32.7 percent 5 years or more (Biggs 1969:4, 25-26; the specimens were collected as dispersed and swimming individuals along coastal reefs, small islands, and inlets, and not from haulout concentrations at large river mouths and mud flats). In a sample of seals taken in the Gulf of Alaska in 1978 (574 seals), 9.2 percent were pups, 6.8 percent were yearlings, 7.8 percent were 2-year-olds, 6.4 percent were 3-year-olds, 9.2 percent were 4-year-olds, and 60.5 percent were 5 or more years; however, the authors state that the collection did not accurately represent age structures of the population below about 4 years of age, because young seals were deliberately undersampled in order to obtain specimens of breeding seals (Pitcher and Caulkins 1979:38-39; the areas sampled stretched from Yakutat to the Alaska Peninsula). There have not been any more recent large collections in Alaska seal populations with which to compare the age compositions reported by subsistence hunters.

If the age differences in regional subsistence harvests reported by hunters do reflect differences in population structures, and if these differences can be linked to seal population dynamics, then the age composition data from subsistence harvests might be a source of information for developing useful indices of the relative condition of regional seal populations. For instance, recent trend counts suggest that Southeast seal populations are relatively abundant and stable or increasing, while Gulf of Alaska populations are depressed, with declines slowing and possibly stopped or reversed in some areas (Lewis, Pendleton, Pitcher, and Wynne 1996:21). Are the older ages of harvested seals in the Southeast and Bristol Bay regions, as reported by subsistence hunters, characteristic of relatively large and stable seal populations, because of proportionately larger older age classes in the population? Similarly, are the younger ages of seals harvested in the Kodiak and Aleutian regions characteristic of relatively

depressed populations responding to changing environmental conditions, because the populations contain proportionately larger young age classes? Do the ages of harvested seals in the North Pacific Rim and South Alaska Peninsula region suggest population compositions intermediate between the Southeast-Bristol Bay and Kodiak-Aleutian seal populations? These relationships are speculative at this point without additional information; however, they appear to be fruitful areas for future inquiry. While short-term changes in the overall size of the subsistence harvest may not be direct indicators of seal population status, the age composition information reported by hunters may provide some useful markers for assessing the health of regional seal populations, if these can be linked with population dynamics of marine mammals.

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APPENDIX A

SURVEY INSTRUMENT USED IN HOUSEHOLD INTERVIEWS, 1995

The Subsistence Harvest of Harbor Seal and Sea Lion by Alaska Natives in 1995, by Robert J. Wolfe and Craig Mishler, Technical Paper No. 238, Division of Subsistence, Alaska Department of Fish and Game, Juneau, September 1996. Final Report For Year Four, Subsistence Study and Monitor System (No. 50ABNF200055), National Marine Fisheries Service.

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OR YOUR C	CHECK IF APPR	No Contact Round									DECEMBER		ups, juveni		DECEMBER													DECEMBER			
THANK YOU FOR YOUR COOPERATION. Is only relevant to Native households.		2 2	•			* * * *			1	Magash 1	Dy MOUNT.]		any were p	•	HOVEMBER													NOVEMBER DECEMBER UNKNOWN			
NO: This survey is only relevant to Native households.	<u> </u>		CWING OFFESTIONS:) (IF NO. GO TO SEA LION PAGE.)			••			> :		.)? [Enter the numbers by monum.]		m wort bure	Of the harbor seals killed and retneved in (January, etc.), flow flighty referrings; contact the harbor seals killed and retneved in (January, etc.), flow flighty referrings;	SEPTEMBER OCTOBER NOVEMBER DECEMBER													OCTOBER		Interviewer:	
NO:			TO SEAL	N _o					IF NO, COMPLETE SEA LION SURVEY.	ox:	? (Enter th	SET LEWISEN	demain of	יבוומוני	SEPTEMBER												lost by your household? [Enter number in total box.] ost? [Enter numbers by month.]	SEPTEMBER		Random Ir	
		IN 1995?	IIF NO. GO	Yes					TE SEA LI(6 How many harbor seals did your household kill and retrieve? [Enter in total box.]	7. In which months were they killed and retrieved? How many in (January, etc.)?	AUGUSI		ny were me	AUGUST												[Enter nun month.]	AUGUST			
		R SEALS	CSNOIL		:		nities?	nities?	COMPLE	ieve? (Ent	nany in (Ja	JULY		.,), 110W 111d	E JULY												by your household? [Enter [Enter numbers by month.]	JULY JULY		LIST: Hunter	
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USEHOLE	ed in your !	OUSEHOI	NO	OMPLE I	meat, hide	?	narboi sea sals from d	seals to o	E, GO TO	seals did	vere they	JANUARY FEBRUARY MARCH		Is killed ar	numbers by mont												or seal we	FEBRUARY MARCH APRIL			
YOUR HC	people live	F YOUR H		(IF YES, PLEASE COMPLETE THE FOLK	 Use harbor seals (meat, hides, or oil)? 	Hunt harbor seals?	Kill and retrieve nation seats?	Give away harbor seals to other households or communities?	R 3 ABOV	anv harbor	h months v	JANUARY		harbor sea	[Enter the numbers by monun.]												9. How many harbor seal were struck and	JANUARY			
ARE ANY MEMBERS OF YOUR HOUSEHOLD ALASKA NATIVES?	How many people lived in your household in FOR ANCHORAGE ONLY: Where did you	HARBOR SEAL DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUNT OR USE HARBOR SEALS IN 1995?	YES	(IF YES, I	During 1995, aid you of your mousemous. 1. Use harbor seals (meat	2. Hunt h		5. Give a	IE VES TO DIJESTION 2 OR 3 ABOVE, GO TO QUESTION	E MOH	7. In whic			8. Of the	(Ector)	(Detail)	MALE FEMAI F	NWONNI	MALE	FEMALE	UNKNOWN	MALE	FEMALE	MAIF	FEMALE	UNKNOWN	9. How		ID LOST	į	
: ANY ME		HARBOR SEAL		100	1995, aic				TOOLE	5		HARBOR SEAL	TOTAL		, d	HARBOR SEAL (Detail)	L			u =				ı	<u>.</u>	ر	During 1995,	HARBOR SEAL	STRUCK AND LOST	Commingity:	
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				TION.	TOTAL			i	TOTAL														<u>.</u>		ERATIO			
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	TES THIS			NAUT Y	numbers by month.] OCTOBER NOVEMBER DECEMBER UNKNOWN		w many we		OCTOBER NOVEMBER DECEMBER UNKNOWN														OCTOBER			interviewer:		
	(IF NO, THAT COMPLETES THIS SURVEY. THANK YOU.)			illies?	IF NO, THIS COMPLETES THE SURVET. INCLUDED THE SEPTEMBER OCTOBER NOVEMBER.	_	ote and ho	מוכי מוכ	SEPTEMBER (in total	SEPTEMBER OCTOBER NOVEMBER DECEMBER UNKNOWN			Random		
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T OR USE SEA LIONS IN 1995?		Yes			rion 6. IF NO, THIS COMPLETES THE SKILL and retrieve? [Enter total number in box.] [rieved? How many in (January, etc.)? [Enter total and the set of the septement of the septem	100		any were	JULY					+	†				 			lost by your household? [Enter number	s by m on			IST: Hunter	:	
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T OR USE	LOWING QUESTIONS:)		s or communities?	s or comm	kill and rieved?	APRIL		January, e	M	H					1	+				+		lost by you	i lost? (En	Ħ				
OLD HUN'	THE FOLI	oil)?	plonseholds	plousehold		MARCH		rieved in (month.J	MARCH									1			struck and	struck and	MARCH				Ī
HOUSEH	O MPLETE	d you or your household: Use sea lions (meat, hides, or oil)?	Hunt sea lions?	Give away sea lions to other households or communities?	STION 2 OR 3 ABOVE, GO TO QUEST How many sea lions did your household In which months were they killed and ret	FEBRUARY		ed and ret	[Enter the numbers by monim.]	FEBRUARY												9 How many sea lions were struck and	10. In which months were they struck and lost?	FEBRUARY				
OF YOUR	NO EASE CON	/our hous	Hunt sea lions?	ny sea lion	OR 3 ABC 19 sea lions months we	JANUARY	1	a lions kill	nter the n	JANUARY												nany sea l	ch months	JANUARY				
SEA LIONS DID YOU OR MEMBERS OF YOUR HOUSEHOLD HUN	YES NO NO NE SE PLEASE COMPLETE THE FOL	During 1995, did you or your household:		Give awa	IF YES TO QUESTION 2 OR 3 ABOVE, GO TO QUEST 6. How many sea lions did your household 7. In which months were they killed and ret			8. Of the sea lions killed and retrieved in (January, etc.), how many were male, remare, and now many many and the sea lions killed and retrieved in (January, etc.).			MALE	FEMALE	II VV	FEMALE	UNKNOWN	MALE	PUP FEMALE	UNKNOWN	MALE	AGE FEMALE	UNKNOWN	MoH 6	10. In whi		TSOJ OJ		lity:	1
JONS OR MI	× =	g 1995, di	તાં છુ ⊲	i vi	:S TO QUE 6. 7.	SEA LIONS	TOTAL	&		SEA LIONS (Detail)			5	MALE FEMALE	こう		PUP	S	UNKNOWN	AGE	'S	During 1995,		SEA LIONS	STRUCK AND LOS		Community:	
SEA LIONS		Durin			IF YE	SEA				SEA		ADULT		Ξ	3				3			on		SE	S	1		

APPENDIX B

SUBSISTENCE TAKES OF HARBOR SEAL AND SEA LION BY REGION

1-2	SOUTHEAST	ALASKA
3-4	NORTH PACIFIC	RIM
5-6	UPPER KENAI -	COOK INLET
7-8	KODIAK ISLAND)
9-10	SOUTH ALASKA	PENINSULA
11-12	ALEUTIAN ISLA	NDS [*]
13-14	PRIBILOF ISLAN	IDS
15-16	SOUTH BRISTO	L BAY
17-18	NORTH BRISTO	L BAY

Table 1. SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 1995

SAMPLING DESIGN:		Active	<u>Other</u>	<u>Total</u>	
MIXED	Total Native Households	600	525	1125	
	Surveyed Households	496	36	532	
	Sampling Fraction	82.7%	6.9%	47.3%	
Sa	imple Household Members	1756	108	1864	
Esti	mated Household Members	2121.1	1575.0	3702.1	

Percentage of Native Households: Estimated Community Harvest

See Harbor and Take (Expanded): Sea Harbor Lion Seal Lion <u>Seal</u> Used N/A N/A **Total Number Harvested** 0.0 1719.1 Hunted **Total Number Struck and Lost** N/A N/A 0.0 170.9 Harvested NΛ N/A Total Number Taken 0.0 1090.0 Received N/A N/A

Gave Away N/A N/A N/A N/A N/A N/A N/A

SEA LION	HARVE	STBY	MON'	TH								U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	/lonth	Total
REPORTED HAI	RVEST AND	TAKE B	Y SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMMU	I) YTINL	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0 0	0.0	0 0	00	0.0	0.0	0 0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0 0	00	0.0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY CON	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		_		•										
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)														

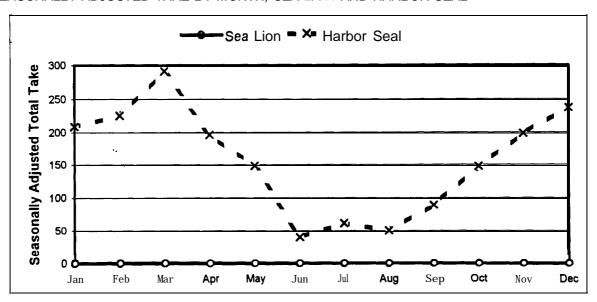
HARBOR	SEAL H	ARVI	EST BY	MON	TH							l	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec I	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOL	DS (UN	EXPAND	ED)					
Harvest	144	154	154	121	93	29	39	20	63	103	133	162	105	1408
Struck & Lost	7	16	44	20	2	2	3	4	0	5	0	5	23	139
Total Take	151	170	190	141	95	31	42	32	63	108	141	167	200	1547
ESTIMATED	HARVEST	AND	TAKE BY	COMN	MUNITY ((EXPAND	DED)							
Harvest	192.0	196.9	103.1	147.3	110.0	32.7	46.6	34.0	74.6	122.9	160.	4 202.3	217.3	1719 1
Struck & Lost	12.2	21.4	52.0	21.9	2.4	2.2	3.5	45	0.0	6.4	9.9	7.5	26.9	170.9
Total Take	204.2	217.3	235.1	169.2	112 4	34.9	50.1	38.6	74.6	129.3	170.3	209.9	2443	1890.0
ESTIMATED	SEASONA	LLY A	ADJUSTED	HARV	EST AND	D TAKE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	196.3	203.5	210.3	171.9	145 4	37.5	56.9	44.5	88.8	140.1	107.4	220.5		1719.1
Struck & Lost	12.2	21.4	72.4	24.3	3.0	2.2	4 1	5.7	0.0	7.0	10.5	0.1		170.9
Total Take	200.5	224.9	290.6	196.2	140 4	39.7	61.0	50.2	0.00	147.1	197.9	236.6		1090.0
Total Take (%)	11.0%	11.9%	15.4%	10.4%	7.9%	2.1%	3.2%	2.7%	4.7%	7.0%	10.5%	12.5%		100.0%
Cum. Take	200.5	433.4	724.0	920.2	1068.6	1108.4	1169.4	1219.6	1308.4	1455.5	1653.4	1890.0		
Cum Take (%)	11.0%	22.9%	38.3%	40.7%	56.5%	50.6%	61.9%	64.5%	69.2%	77.0%	07.5%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 1. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTHEAST ALASKA, 1995

		Sea	Lion			Harbo	r Seal	
	Reported	l by	Community	Est.	Reporte	d by	Commun	ity Est.
	Samp	ole	(Expand	ied)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	_	657	46.7%	793.6	46.2%
Adult Female	0		0.0	***	346	24.7%	426.0	24.0%
Adult Unknown Sex	0		0.0	***	230	16.9%	279.9	16.3%
Juvenile Male	0		0.0		63	4.5%	77.7	4.5%
Juvenile Female	0		0.0		10	1.3%	20.5	1.2%
Juvenile Unknown Sex	0		0.0	_	8	0.6%	11.3	0.7%
Pup Male	0	-	0. 0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		1	0.1%	1.1	0.1%
Pup Unknown Sex	0		0.0	***	5	0.4%	0.0	0.5%
Male Unknown Age	0	•	0.0		21	1.5%	25.0	1.5%
Female Unknown Age	0		0.0		18	1.3%	22.5	1.3%
Unknown Sex and Age	0		0.0		31	2.2%	51. 9	3.0%
Total	0		0. 0		1406	100.0%	1719.1	100.6%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			<u>HARBO</u>	R SEA	\L
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	Take
1992	5.2	1.3	6.4	1992	1476 8	169.5	1666.2
1993	0.0	1.1	1.1	1993	1425.0	190.0	1615.0
1994	3.5	1.1	4.6	1994	1346.5	151.4	1499.9
1995	0.0	0.0	0.0	1995	1719.1	170.9	1890.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 2. SEA LION AND HARBOR SEAL HARVESTS: NORTH PACIFIC RIM, 1995

SAMPLING DESIGN.		Active	<u>Other</u>	<u>Total</u>	
MIXED	Total Native Households	44	540	584	
	Surveyed Households	42	212	254	
	Sampling Fraction	95.5%	39.3%	43.5%	
S	ample Household Members	135	637	772	
Est	imated Household Members	143.2	1522.3	1665.6	

Cum.Take(%)

9.2%

19.3%

24.9%

Percentage of Native Households:	Estimated Community Harvest
Sea Harbor	and Take (Expanded): Sea Harbor
<u>Lion</u> <u>Seal</u>	<u>Lion</u> <u>Seal</u>
Used 14.6% 397%	Total Number Harvested 28.4 252.1
Hunted 4.4% 12.6%	Total Number Struck and Lost 3.0 11.7
Harvested 2.7% 9.9%	Total Number Taken 31.4 263.9
Received 13.5% 34.8%	
Gave Away 4 1% 11.2%	Number Harvested Per Capita 002 0.15

SEA LION HARVEST BY MONTH														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	ARVEST ANI	TAKE	BY SAMPI	LED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	3	6	4	0	3	0	1	0	0	0	2	4	2	n
Struck & Lost	0	0	2	0	1	0	0	0	0	0	0	0	, O	3
Total Take	3	6	6	0	4	0	1	Ó	0	0	2	4	2	28
ESTIMATED	HARVEST	AND	TAKE BY	COMN	MUNITY	(EXPAND	ED)							
Harvest	4.3	6.1	4.0	0 0	31	0 0	10	0.0	0.0	0.0	2.0	53	2.6	28 4
Struck & Lost	0.0	0.0	2.0	0 0	10	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	3.0
Total Take	4.3	61	6.0	0 0	41	0 0	10	0.0	00	0.0	2.0	5.3	26	31 4
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARV	EST AN	D TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	4.5	63	4.2	02	3 3	02	1.2	0.2	0.2	02	2.2	5.5		20 4
Struck & Lost	0.0	0.0	20	0 0	10	0 0	0 0	0.0	0.0	0.0	0.0	0.0		3.0
Total Take	4.5	6.3	6.2	02	4 3	02	12	0.2	0.2	0.2	2.2	5.5		31.4
Total Take (%)	14.4%	19.9%	19.8%	07%	137%	07%	40%	0.7%	07%	0.7%	71%	17.6%		100.0%
Cum Take	45	10.8	17.0	17.2	21 5	218	230	23.2	234	237	25 9	31 4		
Cum Take (%)	14.4%	34 4%	54.1%	540%	68 5%	69 2%	73 2%	73.9%	74.6%	75.3%	02 4%	100.0%		
HARBOR	SEAL H	IARVE	ST BY	/ MON	ITH								Unknown	
HARBOR							Jul			Ckt	Nov		Unknown Month	Total
	Jan	Feb	Mar	Apr	May	Jun	Jul .DS (UN	Aug EXPANI	Sep	Ckt	Nov		Unknown M o n t h	Total
HARBOR REPORTED Harvest	Jan	Feb	Mar	Apr	May			Aug	Sep	Ckt	Nov 26			Total
REPORTED	Jan HARVEST	Feb AND	Mar TAKE B	Apr Y SAMP	May LED HO	Jun DUSEHOL	DS (UN	Aug EXPANI	Sep DED)			Dec	Month	
REPORTED Harvest	Jan HARVEST 22	Feb AND 14	Mar TAKE B'	Apr Y SAMP 2	May PLED HO 2	Jun DUSEHOL 10	DS (UN 11	Aug EXPANI 12	Sep DED)	18	26	Dec 16	Month 32	179
REPORTED Harvest Struck & Lost	Jan HARVEST 22 1 23	Feb AND 14 2 16	Mar TAKE BY 10 1	Apr Y SAMP 2 0 2	May PLED HC 2 0 2	Jun DUSEHOL 10 2	DS (UN 11 0 11	Aug EXPANE 12 0	Sep DED) 4 0	18 4	2 6	Dec 16 0	32 0	179 10
REPORTED Harvest Struck & Lost Total Take	Jan HARVEST 22 1 23	Feb AND 14 2 16	Mar TAKE BY 10 1	Apr Y SAMP 2 0 2	May PLED HC 2 0 2	Jun DUSEHOL 10 2 12	DS (UN 11 0 11	Aug EXPANE 12 0	Sep DED) 4 0	18 4	2 6	Dec 16 0	32 0	179 10
REPORTED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 22 1 23 HARVEST	Feb AND 14 2 16 T AND	Mar TAKE B' 10 1 11 TAKE B	Apr Y SAMP 2 0 2 Y COM	May PLED HO 2 0 2	Jun DUSEHOL 10 2 12 (EXPANI	DS (UN 11 0 11 DED)	Aug EXPANE 12 0 12	Sep DED) 4 0 4	18 4 22	26 0 26	Dec 16 0 16	32 0 32 42.3	179 10 189
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 22 1 23 HARVEST 23.1	Feb 14 2 16 AND 24.2	Mar TAKE BY 10 1 11 TAKE B' 12.7	Apr Y SAMP 2 0 2 Y COMP 2 4	May PLED HO 2 0 2 MUNITY 182	Jun DUSEHOL 10 2 12 (EXPANI 30.3	DS (UN 11 0 11 DED) 121	Aug EXPANE 12 0 12	Sep DED) 4 0 4	18 4 22 22.1	26 0 26 28.0	Dec 16 0 16 18.4	32 0 32 42.3	179 10 189 252 1
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 22 1 23 HARVEST 23.1 11 24.1	Feb AND 14 2 16 F AND 24.2 2.0 26.2	Mar TAKE BY 10 1 11 TAKE B 12.7 16 14.3	Apr 2 SAMP 2 0 2 2 Y COMI 2 4 0 0 2 4	May PLED HO 2 0 2 MUNITY 182 00	Jun DUSEHOL 10 2 12 (EXPANI 30 3 2 6 330	DS (UN 11 0 11 DED) 121 0 0	Aug EXPANE 12 0 12 14.1 0.0	Sep DED) 4 0 4 4.3 0.0 4.3	18 4 22 22.1 44	26 0 26 28.0 0 0 28.0	Dec 16 0 16 18.4 0 0 0	32 0 32 42.3 0.0	179 10 189 252 1 117
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 22 1 23 HARVEST 23.1 11 24.1	Feb AND 14 2 16 F AND 24.2 2.0 26.2	Mar TAKE BY 10 1 11 TAKE B 12.7 16 14.3	Apr 2 SAMP 2 0 2 2 Y COMI 2 4 0 0 2 4	May PLED HO 2 0 2 MUNITY 182 0 0 182	Jun DUSEHOL 10 2 12 (EXPANI 30 3 2 6 330	DS (UN 11 0 11 DED) 121 0 0	Aug EXPANE 12 0 12 14.1 0.0	Sep DED) 4 0 4 4.3 0.0 4.3	18 4 22 22.1 44 264	26 0 26 28.0 0 0 28.0	Dec 16 0 16 18.4 0 0 0	32 0 32 42.3 0.0 42.3	179 10 189 252 1 117
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 22 1 23 HARVEST 23.1 11 24.1 SEASON	Feb AND 14 2 16 F AND 24.2 2.0 26.2 ALLY A	Mar TAKE B' 10 11 TAKE B 12.7 16 14.3	Apr Y SAMP 2 0 2 Y COMI 24 00 24 D HARV	May PLED HO 2 0 2 MUNITY 182 00 182	Jun 10 2 12 (EXPANI 30.3 26 330	DS (UN 11 0 11 DED) 121 00 121 BY CO	Aug EXPANE 12 0 12 14.1 0.0 141 MMUNIT	Sep DED) 4 0 4 4.3 0.0 4.3 TY (EXP	18 4 22 22.1 44 264 ANDED)	26 0 26 28.0 0 0 28.0	Dec 16 0 16 18.4 0 0 18.4	32 0 32 42.3 0.0 42.3	179 10 189 252 1 117 2639
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 22 1 23 HARVEST 23.1 11 24.1 SEASON. 23.2	Feb 14 2 16 7 AND 24.2 2.0 26.2 ALLY A	Mar TAKE B' 10 11 11 TAKE B 12.7 16 14.3 DJUSTEI	Apr Y SAMP 2 0 2 Y COMP 24 00 24 D HARV 34	May PLED HC 2 0 2 MUNITY 182 00 182 VEST AN 182	Jun DUSEHOL 10 2 12 (EXPANI 30.3 26 330 D TAKE 424	DS (UN 11 0 11 DED) 121 00 121 BY CO 235	Aug EXPANE 12 0 12 14.1 0.0 141 MMUNIT	Sep DED) 4 0 4 4.3 0.0 4.3 TY (EXP 8.1	18 4 22 22.1 44 264 ANDED) 28 3 4.4	26 0 26 28.0 0 0 28.0	Dec 16 0 16 18.4 0 0 18.4 19.7	32 0 32 42.3 0.0 42.3	179 10 189 252 1 117 2639
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 22 1 23 HARVEST 23.1 11 24.1 SEASON. 23.2 1.1 24.3	Feb AND 14 2 16 F AND 24.2 2.0 26.2 ALLY A 246 2 0	Mar TAKE B 10 11 TAKE B 12.7 16 14.3 DJUSTEI 13.2 1.6	Apr Y SAMP 2 0 2 Y COMI 24 00 24 D HARV 34	May PLED HC 2 0 2 MUNITY 182 00 182 VEST AN 182 00	Jun 10 2 12 (EXPANI 30.3 26 330 1D TAKE 424 2.6 45.0	DS (UN 11 0 11 DED) 121 00 121 BY CO 235 00 235	Aug EXPANE 12 0 12 14.1 0.0 141 MMUNIT 14.5 0.0	Sep DED) 4 0 4.3 0.0 4.3 5Y (EXP 8.1 0.0 8 1	18 4 22 22.1 44 264 ANDED) 28 3 4.4 32 7	26 0 26 28.0 0 0 28.0 33.1 0.0	Dec 16 0 16 18.4 0 0 0 18.4 19.7 0 0 0	32 0 32 42.3 0.0 42.3	179 10 189 252 1 117 2639 252.1 117

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

590%

64.5%

67.6%

80.0%

92.5%

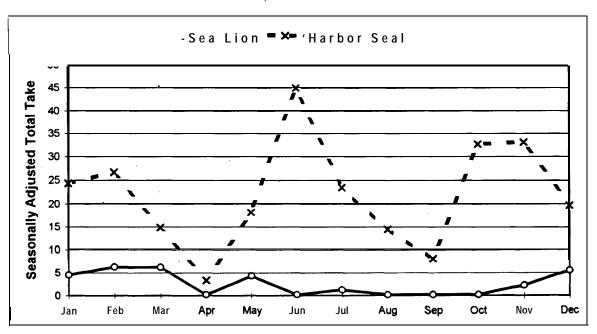
100.0%

501%

262% 331%

		Sea	Lion		Harbor Seal					
	Report	ed by	Commu	nity Est	Repor	ed by	Comm	unity Est.		
	Sarr	ple	(Expa	nded)	San	nple	(Exp	anded)		
	Number	%	Number	%	Number	%	Numbe	r %		
Adult Male	8	32.6%	9.4	33 1%	57	31.6%	01.	7 32.4%		
Adult Female	2	8.0%	2.7	9.4%	26	14.5%	44.	6 17.7%		
Adult Unknown Sex	3	12.0%	30	106%	15	84%	24.	9.8%		
Juvenile Male	2	8.0%	20	7.1%	19	10.6%	23.	94%		
Juvenile Female	1	4.0%	16	58%	0	0.0%	0.	0.0%		
Juvenile Unknown Sex	7	28.0%	70	247%	12	6.7%	12.	2 4.0%		
Pup Male	0	0.0%	0 0	00%	9	5.0%	13.	2 5.2%		
Pup Female	0	0.0%	0 0	00%	0	0.0%	0.	0.0%		
Pup Unknown Sex	0	0.0%	0 0	0.0%	1	0.6%	1.	3 0.5%		
Male Unknown Age	0	0.0%	0 0	00%	0	0.0%	0.	0.0%		
Female Unknown Age	0	0.0%	0.0	00%	0	0.0%	0.	0 00%		
Unknown Sex and Age	. 2	8.0%	26	93%	40	22.3%	50.	6 20.1%		
Total	25	100.0%	264	4 100.0%	179	100.0%	252.	1 1060%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	AL			
		Struck/	Total			Struck/	Total			
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>			
1992	25.1	6.5	31.5	1993	2 3776	33.4	411.0			
1993	25.2	8.7	34.9	199	3 412.3	38.5	450.8			
1994	16.6	9.7	26.3	199	4 411.2	56.6	468.0			
1995	20.4	3.0	31.4	199	5 252.1	11.7	263.9			

SOURCE. Alaska Department of Fish and Game, Division of Subsistence Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska

Table 3. SEA LION AND HARBOR SEAL HARVESTS: UPPER KENAI-COOK INLET, 1995

SAMPLING DESIGN:		<u>Active</u>	Other	<u>Total</u>	
MIXED	Total Native Households	28		28	
	Surveyed Households	16	•	16	
	Sampling Fraction	57.1%		57.1%	
Sa	mple Household Members	63′		63	
Estin	nated Household Members	110.7		110.7	

Percentage of Native Househol	lds:	Estimated Community Harvest		
Sea H	arbor	and Take (Expanded):	Sea	Ha∨
<u>Lion</u>	<u>Seal</u>		Lion	Seal
Used N/A	N/A	Total Number Harvested	0.0	3.7
Hunted N/A	N/A	Total Number Struck and Lost	0.0	0.0
Harvested N/A	N/A	Total Number Taken	0.0	3.7
Received N/A	N/A			
Gave Away N/A	WA	Number Harvested Per Capit	a N/A	N/A

SEA LION HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	ARVEST AND	TAKE I	BY SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND 1	TAKE BY	COMMI	JNITY (EXPAND	ED)							
Harvest	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MUNITY	/ [EXP/	ANDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0 0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)	***		***											
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)	_					***	~~			***	-			

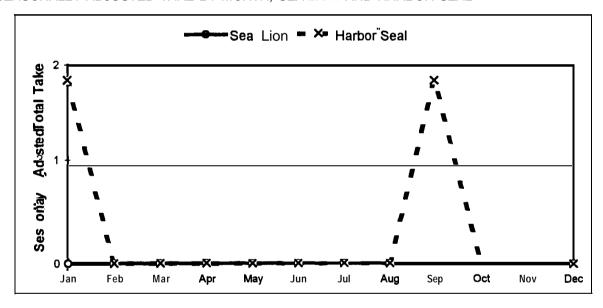
HARBOR	SEAL H	ARVE	ST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	ED HO	USEHOL	DS (U	NEXPAND	DED)					
Harvest	1	0	0	0	0	0	0	0	1	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	0	0	0	0	0	0	0	1	0	0	0	0	2
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY	(EXPAN	DED)							
Harvest	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	3. 7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.8	0.0	0.0	0.0	0.0	00	0.0	0.0	1.8	0.0	0.0	0.0	0.0	3. 7
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST ANI	TAKE	BY C	OMMUNIT	Ү (ЕХ	PANDED)				
Harvest	1.8	0.0	0.0	0.0	0.0	0.0	0 0	0.0	1.8	0.0	0.0	0.0		3. 7
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	1.8	0.0	0.0	0.0	0.0	0.0	0 0	0.0	1.8	0.0	0.0	0.0		3. 7
Total Take (%)	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	00%	0.0%	50.0%	0.0%	0.0%	0.0%		100.0%
Cum Take	1.8	1.8	1.8	1.8	1.0	1.0	1.8	1.8	3. 7	3. 7	3. 7	3. 7		
Cum. Take	(%) 50.0%	50.0%	50.0%		50.0% 5			50.0% 10				100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 3. (cont.) SEA LION AND HARBOR SEAL HARVESTS: UPPER KENAI-COOK INLET, 1995

		Sea	Lion			Harbo	r Seal	
	Reported	l by	Communit	y Est.	Report	ed by	Commu	,
	Samp	le	(Expand	ded)	Sam	ple	(Expa	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	_	0.0	•••	1	50.0%	1.8	50.0%
Adult Female	0	200	0.0	_	0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0	***	0.0	-	0	0.0%	0.0	0.0%
Juvenile Female	0		0.0	-	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0	_	0	0.0%	0.0	0.0%
Pup Male	0		0.0	***	0	0.0%	0.0	0.0%
Pup Female	0		0.0	•••	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0	-	0.0	•••	0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0	•••	0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		1	50.0%	1.8	50.0%
Total	0	•••	0.0		2	100.0%	3.7	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			<u>HARBO</u>	R SEA	<u> </u>	
		Struck/	Total			Struck/	Total	
Year	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	
1992	5.7	3.0	9.5	1992	51.6	0.0	51.6	
1993	7.6	3.3	11.1	1993	49.2	5.6	54.6	
1994	1.4	0.0	1.4	1994	16.2	0.0	16.2	
1995	0.0	0.0	0.0	1995	3.7	0.0	3.7	

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 4. SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 1995

	Active	<u>Other</u>	Total	
Total Native Households	47	227	274	
Surveyed Households	41	184	225	
Sampling Fraction	07.2%	81.1%	82.1%	
mple Household Members	161	545	706	
nated Household Members	184.0	677.1	a61 .o	
	Surveyed Households	Total Native Households 47 Surveyed Households 41 Sampling Fraction 07.2% mple Household Members 161	Total Native Households 47 227 Surveyed Households 41 184 Sampling Fraction 07.2% 81.1% mple Household Members 161 545	Total Native Households 47 227 274 Surveyed Households 41 184 225 Sampling Fraction 07.2% 81.1% 82.1% mple Household Members 161 545 706

Percentage of Native Households:	Estimated Community Harvest	
Sea Harbor	and Take (Expanded): Sea	Harbor
<u>Lion</u> <u>Seal</u>	Lion	<u>Seal</u>
Used 37.7% 56.3%	Total Number Harvested 127.9	223.0
Hunted 20.5% 29.7%	Total Number Struck and Lost 7.7	9.2
Harvested 19.3% 27.7%	Total Number Taken 135.7	232.2
Received 32 1% 42.2%		
Gave Away 18.5% 24.8%	Number Harvested Per Capita 0.15	0.26

SEA LION	SEA LION HARVEST BY 'MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE I	BY SAMP	LED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	1	5	15	11	1	0	2	·4	12	23	13	12	0	, 99
Struck & Lost	0	1	0	2	0	0	0	0	1	I	0	1	- 0	6
Total Take	1	6	15	13	1	0	2	4	13	24	13	13	0	105
ESTIMATED	HARVEST	AND	TAKE E	ву сомі	MUNITY	(EXPAN	IDED)							
Harvest	1.0	6.8	18.9	151	10	0 0	22	5 4	156	30.0	179	141	0.0	127.9
Struck & Lost	0.0	1.2	0 0	33	0 0	0 0	0 0	0 0	12	10	00′	1.0	00	77
Total Take	10	8.0	18.9	184	10	00	22	5 4	168	310	179	151	00	1357
ESTIMATED	SEASONAL	LY A	DJUSTEI	HARVE	EST AN	D TAKE	BY COM	IMUNITY	(EXPA	NDED)				
Harvest	1.0	68	18.9	151	10	00	22	5 4	156	300	179	14 1		127.9
Struck & Lost	0.0	12	0 0	3 3	0 0	00	00	0 0	12	1.0	0.0	10		77
Total Take	1.0	8.0	189	184	10	00	22	5 4	168	31.0	17.9	15.1		1357
Total Take (%)	07%	5.9%	139%	136%	08%	00%	16%	40% 1	2 4%	22.8%	13.2%	11 1%		100.0%
Cum Take	1.0	9.0	27.8	46.2	47 3	47 3	49 5	54 9	71 7	1027	1206	1357		
Cum Take (%)	0.7%	6.6%	20.5%	34 1%	348%	34 8%	36 5%	40 4%	529%	757%	089%	1000%		

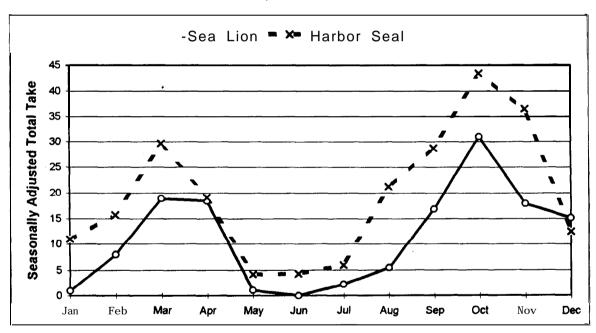
HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mat	Apt	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HOL	ISEHOL	DS (UNE	XPANDE	D)					
Harvest	7	11	23	14	3	4	5	16	24	36	33	11	1	188
Struck & Lost	3	2	2	0	0	0	0	0	0	1	0	0	0	8
Total Take	10	13	25	14	3	4	5	16	24	37	33	11	1	196
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (I	EXPAND	ED)							
Harvest	7.6	13.4	27.3	191	42	43	5 9	21 2	28 5	420	360	12.5	10	2230
Struck & Lost	3 4	2.3	2.4	0.0	0 0	00	00	0 0	00	11	0.0	0.0	0.0	9.2
Total Take	110	157	297	191	42	43	59	21 2	285	43.2	360	125	10	232.2
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	BY COM	MUNITY	(EXPAI	NDED)				
Harvest	7.6	13.4	27.3	191	42	43	5 9	21 2	28 7	42.3	365	12.5		223.0
Struck & Lost	3.4	2.3	2 4	0 0	0 0	00	0 0	0 0	0 0	11	0.0	0 0		9.2
Total Take	11.0	15.7	29.7	19.1	42	43	5 9	21 2	207	434	36.5	12.5	٠	232.2
Total Take (%)	47%	6.8%	128%	82%	18%	18%	26%	9 1%	12 4%	187%	15.7%	5.4%		100.0%
Cum. Take	11.0	26.7	56.4	75.5	797	039	899	111 1	139.8	183.2	219.7	232.2		
Cum Take (%)	4 7%	11.5%	24.3%	32.5%	34 3%	36 1%	38 7%	47 8%	60.2%	78.9%	94.6%	100.0%		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 4. (cont.) SEA LION AND HARBOR SEAL HARVESTS: KODIAK ISLAND, 1995

		Sea	Lion		Harbor Seal					
	Reporte	ed by	Commun	ity Est.	Reporte	d by	Commun	ity Est		
	Sam	ple	(Expanded)		Samp	ole	(Expanded)			
	Number	%	Number	%	Number	%	Number	%		
Adult Male	7	7. 1%	8.0	6.3%	53	28.2%	59.8	26.8%		
Adult Female	14	14.1%	18.5	14.5%	31	16.5%	40.3	18.1%		
Adult Unknown Sex	4	4.0%	5.7	4.5%	4	2.1%	6.6	3.0%		
Juvenile Male	48	48.5%	62.1	48.5%	59	31.4%	67.4	30.2%		
Juvenile Female	23	23.2%	301	23.6%	32	17.0%	39.2	17.6%		
Juvenile Unknown Sex	3	3.0%	3 4	27%	7	3.7%	7.6	34%		
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Male Unknown Age	0	0.0%	0.0	0.0%	1	0.5%	1.0	04%		
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Unknown Sex and Age	0	0.0%	0.0	0.0%	1	0.5%	1.0	0.4%		
Total	99	100.0%	127.9	100.0%	188	3 100.0%	223.0	100.0%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

		SEA	LION		_	HARBOR SEAL				
_			Struck/	Total				Struck/	Total	
	Year	<u>Harvest</u>	Lost	<u>Take</u>		Year	<u>Harvest</u>	Lost	<u>Take</u>	
	1992	41.5	16.3	57.8		1992	225.5	13.1	238.6	
	1993	41.5	16.9	58. 4		1993	171. 7	20.1	191.8	
	1994	57.1	4.2	61.3		1994	168.2	3.6	171.7	
	1995	127.9	7.7	135.7		1995	223.0	9.2	232.2	

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska

Table 5. SEA LION AND HARBOR SEAL HARVESTS: SOUTH ALASKA PENINSULA, 1995

SAMPLING DESIGN:		<u>Active</u>	<u>Other</u>	<u>Total</u>	
MIXED	Total Native Households	29	369	398	
	Surveyed Households	27	147	174	
	Sampling Fraction	93.1%	39.8%	43.7%	
Sa	mple Household Members	113	511	624	
Estin	nated Household Members	121.6	1203.6	1325.3	

HARVEST	AND	USF	INFORMATION
	$\Delta I V D$	$\cup \cup L$	

Percentage of Native Househo	olds:	Estimated Community Harvest		
Sea I	Harbor	and Take (Expanded):	Sea	Harbor
Lion	<u>Seal</u>		Lion	<u>Seal</u>
used 54%	37.4%	Total Number Harvested	8.1	117.0
Hunted 2.9%	16.6%	Total Number Struck and Lost	0.0	11.1
Harvested 0.9%	12.9%	Total Number Taken	8.1	128.0
Received 4.5%	32.6%			
Gave Away o. 9%	15.0%	Number Harvested Per Capita	0. 01	0.09

SEA LION	HARVE	ST B	Y MON	ΤΗ										Unknown	
	Jan	Feb	Mar	Apr	Mav	Jun	Jı	اد	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HO	JSEHOLDS	S (UNEX	PANDED)								
Harvest	0	0	2	1	0	0		0	2	1	0	1	0	0	7
Struck & Lost	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Total Take	0	0	2	1	0	0		0	2	1	0	1	0	0	7
ESTIMATED	HARVEST	AND	ΓΑΚΕ ΒΥ	СОМІ	MUNITY	(EXPAI	NDED)								
Harvest	0 0	0.0	20	10	0 0	0 0	0	0	2.6	1.0	0 0	1.6	0.0	0.0	8 1
Struck & Lost	0 0	0.0	0 0	0 0	0 0	0 0	0	0	0.0	0.0	0 0	0.0	0.0	0 0	0.0
Total Take	0 0	0 0	20	10	00	00	0	0	26	1.0	0 0	1.6	0.0	0.0	8.1
ESTIMATED	SEASONA	LLY AI	DJUSTED	HARV	EST AN	ID TAK	E BY	сомі	MUNI	TY (EXF	ANDED)				
Harvest	0 0	0.0	20	10	0 0	0 0	0	0	26	10	00	16	0.0		81
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0	0	0.0	0 0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	20	10	0 0	0 0	0	0	26	10	0.0	1.6	0.0		81
Total Take (%)	0.0%	00%	246%	123%	00%	00%	009	% 31	1.6%	12.3%	0.0%	19.3%	0.0%		100.0%
Cum Take	0 0	0 0	20	30	3 0	30	3	0	56	6.6	66	81	81		
Cum Take (%)	0 0%	0.0%	246%	368%	368%	368%	368%	68	4%	80.7%	807%	100.0%	100.0%		

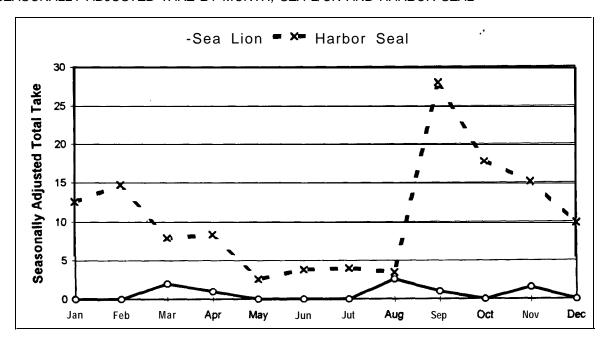
HARBOR	SEAL H	IARVI	EST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOL	.DS (UN	IEXPAND	DED)					
Harvest	10	11	6	6	2	3	3	3	12	4	11	7	1	79
Struck & Lost	0	1	1	1	0	0	0	0	0	0	1	1	4	9
Total Take	10	12	7	7	2	3	3	3	12	4	12	8	5	88
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY	(EXPANI	DED)							
Harvest	12.3	12.8	6 4	70	25	37	39	3.4	26.6	16.5	13.1	7.9	1.0	117.0
Struck & Lost	0.0	1.3	1.3	11	0 0	0 0	0 0	0 0	0.0	0.0	1.6	1.6	4.2	11.1
Total Take	12.3	141	7.7	8 1	25	37	39	3 4	26.6	16.5	147	9.4	5.2	128.0
ESTIMATED	SEASONA	ALLY A	ADJUSTED	HARV	EST ANI	D TAKE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	12.3	12.9	6 4	7.1	25	37	3.9	3 4	26.9	16.8	13.2	7.9		117.0
Struck & Lost	0.3	1.8	15	13	01	01	01	01	1.1	0.9	1.9	1.9		11 1
Total Take	12.5	14.7	8.0	8 4	26	38	4.0	3.4	28.0	17.7	15.1	9.8		128.0
Total Take (%)	9.8%	11.5%	6.2%	66%	20%	3.0%	3 1%	27%	21.9%	13.8%	11.8%	7.7%		100.0%
Cum Take	12.5	21.2	35.2	43.6	461	49.9	53.9	51.3	8 5.3	103.1	118. 2	128. 0		
Cum Take (%)	9.8%	21.3%	275%	340%	360%	390%	421%	44.8%	667%	805%	923%	100.0%		

SOURCE, Alaska Department of Fsh and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska

Table 5. (cont.) SEA LION AND HARBOR SEAL HARVESTS: SOUTH ALASKA PENINSULA, 1995

		Sea	Lion		Harbor Seal					
	Reporte	ed by	Communit	y Est.	Report	ed by	Communi	ity Est.		
	Sam	ole	(Expanded)		San	nole	(Expanded)			
	Number	%	Number	%	Number	%	Number	%		
Adult Male	3	42.9%	36	439%	3	7 46.8%	54.1 4	46.3%		
Adult Female	2	266%	2.6	31 6%	4	5.1%	6.0	5.2%		
Adult Unknown Sex	0	0.0%	0.0	0.0%	5	63%	7.0	6.0%		
Juvenile Male	2	286%	2.0	24.6%	12	15.2%	12.7	10.9%		
Juvenile Female	0	0.0%	0.0	0.0%	4	5.1%	16.5	14.1%		
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	13	16.5%	16.1	13.7%		
Pup Male	0	0.0%	0.0	0.0%	1	1.3%	1.2	1.0%		
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	1.3%	1.3	1.1%		
Male Unknown Age	0	0.0%	0 0	0.0%	0	0.0%	0.0	0.0%		
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Unknown Sex and Age	0	00%	0 0	0.0%	2	2.5%	2.1	1.8%		
Total	7	1000%	81	100.0%	79	100.0%	117.0	100.0%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	۸L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	Year	<u>Harvest</u>	Lost	<u>Take</u>
1992	2.4	0.0	2.4	1992	115.5	13.1	128.6
1993	4.6	1.2	5.7	1993	100.0	23.1	1231
1994	4.6	1.1	5.7	1994	98.6	11.1	109.8
1995	8.1	0.0	8. 1	1995	117. 0	11.1	128. 0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska

Table 6. SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 1995

SAMPLING DESIG	V:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
MIXED	Total Native Households	32	129	161	
	Surveyed Households	23	61	84	
	Sampling Fraction	71.9%	47.3%	52.2%	
	Sample Household Members	75	163	238	
Es	timated Household Members	104.3	357.8	462.1	

Percentage of Native Households:	Estimated Community Harvest
Sea Harbor	and Take (Expanded): Sea Harbor
<u>Lion</u> <u>Seal</u>	<u>Lion</u> <u>Seal</u>
Used 50.1% 50.6%	Total Number Harvested 85.0 86.9
Hunted 13.9% 16.9%	Total Number Struck and Lost 11.1 9.7
Harvested 10.8% 15.4%	Total Number Taken 96.1 96.6
Received 48.5% 47.5%	
Gave Away 10.2% 15.4%	Number Harvested Per Capita 0.18 0.19

SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	Dec 1	Month	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	5	3	5	2	0	3	0	3	2	6	4	13	4	50
Struck & Lost	1	0	1	1	0	0	0	1	0	1	1	2	0	8
Total Take	6	3	6	3	0	3	0	4	2	7	5	15	4	58
ESTIMATED	HARVEST	AND 1	TARE BY	COMM	IUNITY	(EXPAND	DED)							
Harvest	7.0	4.2	6.2	2.0	0.0	3.4	0.0	5.3	3.9	11.7	8.9	22.5	10.0	85.0
Struck & Lost	1.4	0.0	1.4	1.4	0.0	0.0	0.0	1.4	00	14	1.4	2.8	0.0	11.1
Total Take	8.3	4.2	7.6	3.4	0.0	3.4	0.0	6.7	3.9	13.1	10.3	25.3	10.0	96.1
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST ANI	D TARE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	7.0	4.2	6.2	2.0	0.0	3.4	0.0	6.1	4.7	14.2	11.4	25 9		85.0
Struck & Lost	1.4	0.0	1.4	14	0.0	0.0	0.0	1.4	0.0	1.4	1.4	2.8		11.1
Total Take	8.3	4.2	7.6	3.4	0.0	3.4	0.0	7.5	4.7	15.6	12.8	28.6		961
Total Take (%)	8.7%	4.3%	7.9%	3.5%	0.0%	3.5%	0.0%	7.8%	4.9%	16.2%	13.3%	29.8%		100.0%
Cum. Take	8.3	12.5	20.1	23.5	23.5	26.9	26.9	34 4	39.1	54.7	67.4	96.1		
Cum. Take (%)	8.7%	13.0%	20.9%	244%	24.4%	28.0%	28.0%	358%	407%	56.9%	70.2%	100.0%		
	OEAL L		OT DV	1401	TII									
HARBOR	SEAL H	ARVE	:01 BY	MON	TH Man				0	0-4		ا	Jnknown	-

HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOL	.DS (UI	IEXPANI	DED)					
Harvest	2	4	2	1	3	0	2	2	3	9	9	5	4	46
Struck & Lost	0	0	1	0	0	0	0	0	1	1	1	3	0	7
Total Take	2	4	3	1	3	0	2	2	4	10	10	8	4	53
ESTIMATED	HARVEST	AND	TARE BY	COMM	IUNITY	(EXPANI	DED)							
Harvest	2.4	5.2	3.9	1.4	3.4	0.0	5.0	5.0	4.9	15.5	22.2	8.1	10.0	86.9
Struck & Lost	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	4.2	0.0	9.7
Total Take	2.4	5.2	5.3	1.4	3.4	0.0	5.0	5.0	6.3	16.8	23.6	12.2	10.0	96.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AN	D TAKE	BY CO	OMMUNIT	ГҮ (ЕХР	ANDED)				
Harvest	2.4	5.2	4.7	1.4	3.4	0.0	6.5	6.5	5.7	17.8	24.5	8.8		88.9
Struck & Lost	0.0	0.0	1.4	0.0	0.0	0.0	00	0.0	14	1.4	14	4.2		9.7
Total Take	2.4	5.2	6.1	1.4	3.4	0.0	6.5	6.5	7.1	19.2	25.9	13.0		96.6
Total Take (%)	2.5%	5.4%	6.3%	1.4%	3.5%	0.0%	6.8%	6.8%	7.3%	19.8%	26.8%	13.5%		100.6%
Cum. Take	2.4	7.6	13.6	15.0	18.4	18.4	24.9	31.5	38.5	57.7	83.6	96.6		
Cum. Take (%)	2.5%	7.8%	14.1%	15.5%	19.0%	19.0%	25.8%	32.6%	39.9%	59.7%	86.5%	100.0%		
	·		•											

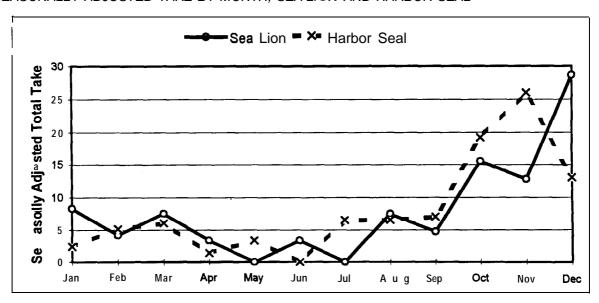
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and fvlonrtor System for Sea Lions and Harbor Seals in Alaska.

Table 6. (cont.) SEA LION AND HARBOR SEAL HARVESTS: ALEUTIAN ISLANDS, 1996

HARVEST BY AGE AND SEX

	Sea Lion					Harbor Seal				
	Reporte Sam	,	Commun (Expar	,	· ·	t ed bv nple .	Commur (Expar	•		
	Number	%	Number		% Number	· %	Number	%		
Adult Male	12	24.9%	20.0	23.5%	27	50.7%	54.2	62.4%		
Adult Female	8	16.0%	15.9	10.7%	2	4.3%	3.9	4.5%		
Adult Unknown Sex	1	2.0%	1.4	1.6%	1	2.2%	1.4	1.6%		
Juvenile Male	14	28.0%	20.2	23.8%	7	15.2%	10.5	12.0%		
Juvenile Female	5	10.0%	9.2	10.8%	0	0.0%	0.0	0.0%		
Juvenile Unknown Sex	6	12.0%	8.3	9.8%	5	10.9%	7.0	8.0%		
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%		
Pup Unknown Sex	0	0.0%	0.0	0.0%	C	0.0%	0.0	0.0%		
Male Unknown Age	0	0.0%	0.0	0.0%	C	0.0%	0.0	0.0%		
Female Unknown Age	0	0.0%	0.0	0.0%	C	0.0%	0.0	0.0%		
Unknown Sex and Age	4	0.0%	10.0	11.8%	4	8.7%	10.0	11.5%		
Total	50	100.0%	85.0	100.0%	46	100.0%	86.9	100.0%		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			<u> </u>	<u> IARBOI</u>	R SEA	<u>L</u>
Vans	Linning	Struck'	Total Take	•	Vaar	Usayost	Struck/	
<u>Year</u>	Harvest	Lost	Take		Year	Harvest	1021	<u>Take</u>
1992	104.3	30.9	135.2		1992	94.3	21.4	115.7
1993	99.0	24.8	123.8		1993	05.0	15.4	100.4
1994	101.8	20.5	122.3		1994	124.9	22.6	147.5
1995	85.0	11.1	96.1		1995	86.9	9.7	96.6

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 7. SEA LION AND HARBOR SEAL HARVESTS: PRIBILOF ISLANDS, 1995

SAMPLING DES	IGN:	<u>Active</u>	Other	<u>Total</u>	
MIXED	Total Native Households	59	142	201	
	Surveyed Households	47	71	118	
	Sampling Fraction	79.7%	50.0%	58.7%	
	Sample Household Members	210	239	449	
	Estimated Household Members	263.6	503.4	767.0	

Percentage of Native Househo	olds:	Estimated Community Harvest	
Sea H	larbor	and Take (Expanded): Sea	Harbor
<u>Lion</u>	<u>Seal</u>	<u>Lion</u>	<u>Seal</u>
Used 53.3%	3.1%	Total Number Harvested 57.6	2.5
Hunted 19.7%	0.6%	Total Number Struck and Lost 10.3	0.0

Harvested 15.0% 0.6% Received 48.7% 2.5% Gave Away 15.2% 0.6%

Number Harvested Per Capita 0.08 0.00

Total Number Taken 67.9

2.5

SEA LION	HARVE	EST B	BY MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HAI	RVEST AND	TAKE	BY SAMPL	ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	3	8	0	0	10	0	0	0	3	8	3	3	0	38
Struck & Lost	0	1	3	0	1	0	0	0	0	0	0	0	4	9
Total Take	3	9	3	0	11	0	0	0 '	3	8	3	3	4	47
ESTIMATED	HARVEST	AND	TAKE BY	COMN	IUNITY (EXPAND	DED)							
Harvest	3.8	11.2	0.0	0.0	191	00	0 0	0.0	38	12.2	3.8	3.8	0.0	57.6
Struck & Lost	0.0	1.0	38	0 0	1.3	0.0	0 0	0.0	0.0	0.0	0 0	0.0	4.3	10.3
Total Take	3.8	12.2	3.8	0 0	20.4	0 0	0.0	0.0	3.8	12.2	3.8	3.8	4.3	67.9
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	ву со	MMUNITY	(EXP	ANDED)				
Harvest	3.8	11.2	0.0	0 0	191	0 0	0.0	0 0	3.6	12.2	3.8	38		57.6
Struck & Lost	0.0	4.0	4.7	0 0	16	00	0.0	0.0	0.0	0.0	0.0	0.0		10.3
Total Take	3.8	15.2	4.7	0 0	20.7	0.0	0.0	0.0	3.0	12.2	3.8	3.8		67.9
Total Take (%)	5.5%	22.4%	6 9%	00%	30.5%	00%	00%	0.0%	5.5%	18.0%	5.5%	5.5%		100.0%
Cum Take	3.0	19.0	237	237	444	444	444	444	48.2	604	642	67.9		
Cum Take (%)	55%	27.9%	349%	34 9%	65 4%	65 4%	65 4%	65 4%	70 9%	88.9%	94.5%	100.0%		

HARBOR SEAL HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPLE	D HOU	SEHOLD	S (UN	EXPANDE	D)					
Harvest	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	2	0	0	0	0	0	0	0	0	0	0	0	0	2
ESTIMATED	HARVEST	AND	TAKE BY	COMMU	NITY (E	EXPANDI	ED)							
Harvest	2.5	0.0	0.0	0.0	00	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	2.5
Struck & Lost	0.0	0 0	0.0	0 0	0 0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	2.5	0.0	0.0	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	25
ESTIMATED	SEASONA	ALLY A	ADJUSTED	HARVES	T AND	TAKE	ву со	MMUNITY	(EXP	ANDED)				
Harvest	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		2.5
Struck & Lost	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.5
Total Take (%)	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
Cum Tak	e(%) 10 0	0.0% 10	0. 0% 100.	0% 10	0.0%	100.0% 1	00.0% 1	00.0% 100.0	0% 100.	0% 100.09	6 100.0%	100.0%	i	

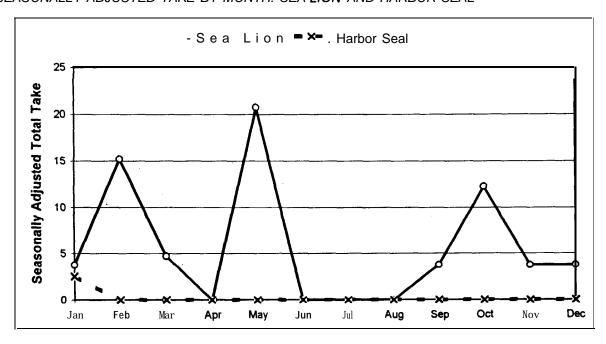
SOURCE. Alaska Department of Fish and Game, Division of Subsistence Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

Table 7. (cont.) SEA LION AND HARBOR SEAL HARVESTS: PRIBILOF ISLANDS, 1995

HARVEST BY AGE AND SEX

		Sea Lion			Harbor Seal			
	Reporte	ed by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Sam	ole	(Expan	ded)	Samı	ole	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	6	15.6%	6.5	11.3%	0	0.0%	0.0	0.0%
Adult Female	0	0.0%	00	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	00	00%	0	0.0%	0.0	0.0%
Juvenile Male	26	664%	34.8	604%	2	1000%	2.5	100.0%
Juvenile Female	2	5.3%	25	44%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	3	7.9%	103	179%	0	0.0%	0.0	0.0%
Pup Male	0	00%	0 0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0 0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	00	00%	0	0.0%	0.0	0.0%
Male Unknown Age	0	00%	00	00%	0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	0 0	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	1	2.6%	34	6.0%	0	0.0%	0.0	0.0%
Total	36	1000%	5 7 6	100.0%	2	100.0%	2.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH. SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

		SEA	LION		_	HARBOR SEAL					
			Struck/	Total	·			Struck/	ck/Total		
2	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>		Year	<u>Harvest</u>	Lost	Take		
1	992	176. 6	120. 2	296.8		1992	23	1. 2	3.5		
1	993	165.4	80.0	245.4		1993	2.3	1.2	3.5		
1	994	149.8	43. 5	193. 3		1994	7.3	0.0	7.3		
1	1995	57.6	10.3	67.9		1995	2.5	0.0	2.5		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsatence Study and Monitor System for Sea Lions and Harbor Seals In Alaska

Table 8. SEA LION AND HARBOR SEAL HARVESTS: SOUTH BRISTOL BAY, 1995

SAMPLING DESIGN	:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
MIXED	Total Native Households	15	258	273	
	Surveyed Households	15	199	214	
	Sampling Fraction	100.0%	77.1%	78.4%	
S	ample Household Members	53	578	631	
Est	imated Household Members	53.0	734.3	787.3	

Percentage of Native Ho	useho	olds:	Estimated Community Harvest		
	Sea	Harbor	and Take (Expanded):	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
Used	0.0%	37.0%	Total Number Harvested	0.0	68.3
Hunted	0.0%	16.2%	Total Number Struck and Lost	0.0	28 3
Harvested	0.0%	11.4%	Total Number Taken	0.0	96.6
Received	0.0%	27.5%			
Gave Away	0.0%	15.2%	Number Harvested Per Capita	0.00	0.09

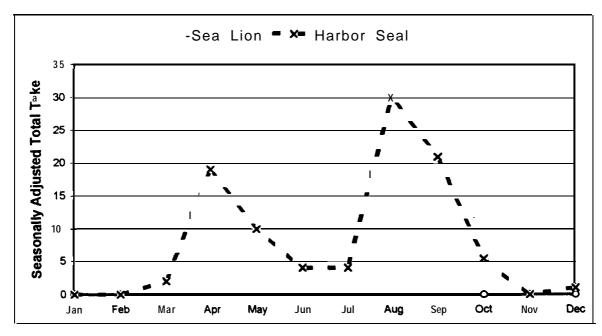
SEA LION	I HARVE	ST BY	/ MON	TH								U	nkno	w n
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	lonth	Total
REPORTED HA	RVEST AND	TAKE B	Y SAMPLE	D HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (E	EXPAND	ED)							
Harvest	0.0	00	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	00	0 0	0 0	0 0	0 0	00	0.0	0.0	00	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	00	0 0	00	0.0	00	00	0.0	0.0	0.0	0.0	00
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	00	00	0 0	00	0 0	00	0.0	00	0.0	0.0	0.0	0 0		0.0
Struck & Lost	00	00	0.0	00	00	00	0.0	0.0	0.0	00	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		•••		_										
Cum Take	0.0	0.0	00	0.0	' 0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)	***						•••	***						

HARBOR	SEAL H	ARV	EST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep.	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOL	DS (UN	IEXPAN	DED)					
Harvest	0	0	1	14	7	3	2	18	8	5	0	0	1	59
Struck & Lost	0	0	1	4	3	1	2	5	6	0	0	1	0	23
Total Take	0	0	2	18	10	4	4	23	14	5	0	1	1	82
ESTIMATED	HARVEST	AND	TAKE BY	COMM	MUNITY (EXPAND	DED)							
Harvest	0.0	0.0	1.0	140	7.0	3.0	2.0	233	11.5	54	0 0	0.0	10	68.3
Struck & Lost	0.0	0.0	1.0	4.0	30	10	20	6.8	9.5	0.0	0.0	1.0	0.0	28.3
Total Take	0.0	0.0	2.0	16.0	100	40	4.0	30	1 21.1	54	0.0	1.0	1.0	96.6
ESTIMATED	SEASONA	LLY A	ADJUSTED	HARV	EST AND	TAKE	ву со	OMMUNI	TY (EXP	ANDED)				
Harvest	0.0	0.0	1.0	15 1	7.0	3.0	2.0	23.3	115	54	0.0	0.0		68.3
Struck & Lost	0.0	0.0	10	4.0	3 0	10	2.0	68	9.5	0.0	0.0	1.0		28.3
Total Take	0.0	00	2.0	19 1	10.0	4.0	4.0	30.1	21.1	5.4	0.0	1.0		96.6
Total Take (%)	0.0%	0.0%	21%	19.7%	104%	4 1%	41%	31.1%	21.8%	5.6%	0.0%	1.0%		100.0%
Cum Take	0.0	0.0	2.0	21.1	31.1	35.1	39.1	59.1	90.2	95.6	95.6	96.6		
Cum Take (%)	0.0%	0.0%	2.1%	218%	32.2%	363%	40.4%	71.6%	93.4%	99.0%	99.0%	100.0%		

SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Akska.

		Sea	Lion			Harbo	r Seal	
	Reporte	d by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Sam	de	(Expan	ded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		6	10.2%	6.4	9.3%
Adult Female	0	•	0.0		4	6.8%	4.0	5.9%
Adult Unknown Sex	0	•••	0.0		38	64.4%	46.8	68.6%
Juvenile Male	0	•	0.0		0	0.0%	0.0	0.0%
Juvenile Female	0	•••	0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		2	3.4%	2.0	2.9%
Pup Male	0		0 0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0	•••	2	3.4%	2.0	2.9%
Male Unknown Age	0		0.0	***	0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0	***	0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0	***	7	11.9%	7.0	10.3%
Total	0		0.0	***	59	100.0%	68.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



EST/MATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		_	HARBOR SEAL					
		Struck/	Total	•			Struck/	Total		
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>		<u>Year</u>	<u>Harvest</u>	Lost	Take		
1992	0.0	0.0	0.0		1992	99.0	66.6	167.6		
1993	0.0	0.0	0.0		1993	73.6	57.3	130.9		
1994	0.0	0.0	0.0		1994	121.6	59.3	180.9		
1995	0.0	0.0	0.0		1995	66.3	28.3	96.6		

SOURCE: Alaska Department of Fiih and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska

Table 9. SEA LION AND HARBOR SEAL HARVESTS: NORTH BRISTOL BAY, 1995

SAMPLING DESIGN	J:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
MIXED	Total Native Households	120	567	687	
	Surveyed Households	112	157	269	
	Sampling Fraction	93.3%	27.7%	39.2%	
!	Sample Household Members	511	599	1110	
Es	timated Household Members	545.7	1964.1	2509.9	

Percentage of Native Ho	useh	olds:	Estimated Community Harvest				
	Sea H	Harbor Seal and	and Take (Expanded):	sea Harbor spotted			
	<u>Lion</u>	Spotted Seal		Lion	Seal	Seal	
used	0.5%	69.6%	Total Number Harvested	0.0	25.9	1637	
Hunted	0.0%	15.8%	Total Number Struck and Lost	0.0	2.4	33.5	
Harvested	0.0%	12.3%	Tota l Number Taken	0.0	28.3	197.2	
Received (0.5%	64.9%	·				
Gave Away	0.0%	16 1%	Number Harvested Per Capita	0.00	0.01	0.07	

SEA LION	I HARVE	ST B	Y MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0 .	. 0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0 0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	00	00
Total Take	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	00	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	00	0.0	0.0	0.0	0 0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0		0.0
Total Take (%)			_	•••			_	•••		•••				
Cum Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)						-		-						

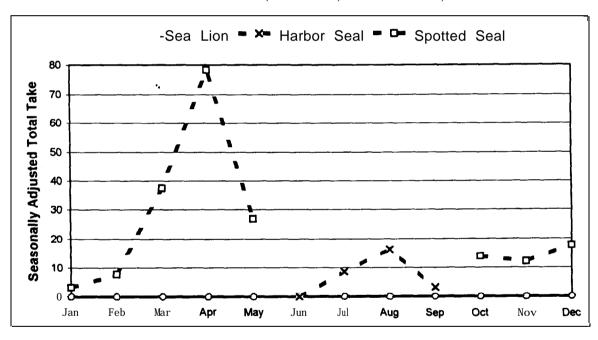
HARBOR	SEAL A	ND SI	POTTEL) SEA	L HAF	RVEST	BY M	ONTH						
			Otted Seal				Harbor				otted Sea		Unknown	
	Jan	teb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND 1	AKE BY	SAMPI	LED HO	USEHOL	.DS (UN	IEXPANI	DED)					
Harvest	3	7	27	54	18	0	5	3	3	7	11	16	2	156
Struck & Lost	0	0	8	12	5	0	2	0	0	5	0	0	1	33
Total Take	3	7	35	66	23	0	7	3	3	12	11	16	3	189
ESTIMATED	HARVES	T AND	TAKE BY	COMM	UNITY (EXPAN[DED)							
Harvest	3.3	7.1	29.0	63.3	297	0 0	57	16.0	3.3	7.9	12.2	177	2.7	189.6
Struck & Lost	0 0	0.0	8.4	127	5.9	00	20	0.0	0.0	5.9	0.0	0.0	1.0	359
Total Take	3.3	7.7	37.4	76.0	26 6	0.0	7.7	16.0	3.3	138	12.2	17.7	3.7	225.5
ESTIMATE	SEASON	ALLY A	DJUSTED	HARV	EST AN	D TAKE	ву сс	MMUNI	TY (EXP.	ANDED)				
Harvest	3.3	7.7	29.0	649	21.0	0.0	6.3	16.3	3.3	7.9	12.2	17.7		189.6
Struck & Lost	0.0	0.0	8 4	13.3	5.9	0.0	2.4	0.0	0.0	5.9	0.0	0.0		35.9
Total Take	3.3	7.7	37.4	78.2	26.9	0.0	8.7	16.3	3.3	13.9	12.2	17.7		225.5
Total Take (%)	1.5%	3.4%	16.6%	34.7%	11.9%	'0.0%	3.8%	7.2%	1.5%	6.2%	5.4%	7.8%		100.0%
Cum. Take	3.3	11.1	48.4	1266	1535	1535	1622	178.5	181.8	195.6	297.8	225.5		
Cum Take (%) 1.5%	4.9%	21.5%	56.2%	68.1%	68.1%	71.9%	79.2%	89.6%	869%	92.2%	109.0%		

SOURCE: Alaska Department of Fah and Game, Diision of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

		Sea Lion				Harbor Seal				spotted Seal			
	Reported	d by	Communi	ty Est	Reporte	ed by	Commun	ty Est.	Reporte	d by	Communi	ty Est.	
	Samp	le	(Expanded)		Sample*		(Expanded)		Sample'		(Expanded)		
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	%	Number	<u>%</u>	Number	<u>%</u>	
Adult Male	0		0.0		3	27.3%	4.3	16.3%	27	16.9%	299	18.3%	
Adult Female	0	_	0.0		3	27.3%	3.7	14.2%	10	7.0%	11.1	6.6%	
Adult Unknown Sex	0	_	0.0		2	18.2%	2.2	8.3%	28	19.6%	31.9	19.6%	
Juvenile Male	0		0.0		2	18.2%	14.4	54.6%	12	8.4%	13.9	8.5%	
Juvenile Female	0		0.0		1	9.1%	1.7	6.6%	9	6.3%	10.0	6.1%	
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	00%	28	19.6%	32.0	19.696	
Pup Male	0		0.0		0	0.0%	0.0	0.0%	3	2.1%	3.3	2.0%	
Pup Female	0		0.0		0	0.0%	0.0	0.0%	2	1.4%	2.2	1.4%	
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	3	2.1%	3.3	2.0%	
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%	2	1.4%	2.1	1.3%	
Female Unknown Age	0		00	***	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%	
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%	19	13.3%	23.4	14.4%	
Total	0	***	0.0	-	11	100.0%	26.4	100.0%	143	100.0%	163.2	100.0%	

[•] Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA LION			<u>-</u> _	IARBO	R SEA	<u>.L</u>	S	SPOTTED SEAL					
		Struck/	Total			Struck/	Total			Struck/	Total			
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	7.0	0.0	7.8	1992	58.4	13.2	71.6	1992	364. 1	72.5	436.6			
1993	3.3	3.3	6.5	1993	46.1	20.0	66.1	1993	215. 1	49. 1	264. 1			
1994	1. 2	0.0	1. 2	1994	16. 2	3.3	19.5	1994	226. 5	42.9	269. 5			
1996	0. 0	0.0'	0.0	1995	25. 9	2.4	28.3	1995	163. 7	33. 5	197. 2			

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seats in Alaska

APPENDIX C

SUBSISTENCE TAKES OF HARBOR SEAL AND SEA LION BY COMMUNITY

SOUTHEAST ALASKA

1-2	Angoon
3-4	Craig
5-6	Haines
7-8	Hoonah
9-10	Hydaburg
11-12	Juneau
13-14	Kake
15-16	Ketchikan
17-l 8	Klawock
19-20	Klukwan
21-22	Pelican
23-24	Petersburg
25-26	Saxman
27-28	Sitka
29-30	Wrangell
31-32	Yakutat

NORTH PACIFIC RIM

33-34	Chenega Bay
35-36	Cordova
37-38	Nanwalek
39-40 .	Port Graham
41-42	Seldovia
43-44	Seward
45-46	Tatitlek
47-48	Valdez

UPPER KENAI-COOK INLET

49-50	Anchorage
51-52	Homer

KODIAK ISLAND

53-54	Akhiok
55-56	Karluk
57-58	Kodiak City
59-60	Larsen Bay
61-62	Old Harbor
63-64	Ouzinkie
65-66	Port Lions

SOUTH ALASKA PENINSULA

67-68	Chignik Bay
69-70	Chignik Lagoon
71-72	Chignik Lake
73-74	False Pass
75-76	Ivanof Bay
77-78	King Cove
79-80	Perryville
81-82	Sand Point

ALEUTIAN ISLANDS

83-84	Akutan
85-86	Atka
87-88	Nikolski
89-90	Unalaska

PRIBILOF ISLANDS

91-92	St. George
93-94	St. Paul

SOUTH BRISTOL BAY

95-96	Egegik
97-98	King Salmon
99-l 00	Levelock
101-102	Naknek
103-104	Pilot Point
105-l 06	Port Heiden
107-l 08	South Naknek

NORTH BRISTOL BAY

109-i 10	Aleknagik
11 l-l 12	Clark's Point
113-l 14	Dillingham
115-l 16 117-118	Manokotak

Table 1. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Angoon, 1995

SAMPLING DESIGN:

CHAIN REFERRAL Total Referred Households 55
Surveyed Households 51

Sampling Fraction 92.7% Sample Household Members 211 Estimated Household Members 227.5

HARVESTAND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea	Harbor and Take (Expanded):		S e a	Harbor	
<u>Lion</u>	Seal		<u>Lion</u>	Seal	
used 0.0%	74.5%	Total Number Harvested	0.0	80.9	
Hunted 0.0%	392%	Total Number Struck and Lost	0.0	9.7	
Harvested 0.0%	35.3%	Total Numbe r Taken	0.0	99.6	
Received 0.0%	49.0%				
Gave Away 0.0%	27.5%	Number Harvested Per Capit	a N/A	N/A	

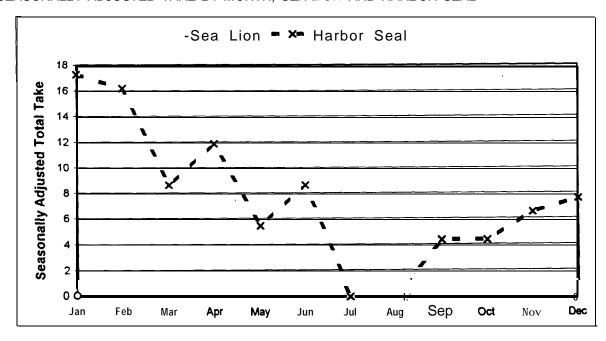
SEA LION HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPLI	ED HOUS	EHOLDS ((UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMMU	JNITY (E	XPAND	ED)							
Harvest	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	00	0.0	0.0	0 0	0.0	00
Struck & Lost	0 0	0.0	00	0 0	0 0	00	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0
Total Take	0 0	0.0	0.0	0 0	0 0	00	0 0	00	0.0	0 0	00	0.0	0.0	0 0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0 0	0.0	0 0	00	0 0	0.0	0.0	00	0.0	0.0		0.0
Struck & Lost	0 0	0 0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take (%)								_						
Cum. Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)		_		•••	-									
$\mu \wedge \nu \nu \cap \nu$	SEVI H	A DV	EQT RV	$M \cap M$	ГЦ							Hr	known	
HARBOR	SEAL H. Jan	ARVI Feb	EST BY Mar	MON7 Apr	TH May	Jun	Jul	Aug	Sep	Ckt	Nov	Ur De c M	nknown I o n t h	Total
REPORTED	Jan	Feb	Mar	Apr	May			Aug Expande	· · · · · · · · · · · · · · · · · · ·	Ckt	Nov			Total
	Jan	Feb	Mar	Apr	May				· · · · · · · · · · · · · · · · · · ·	Ckt 4	Nov 6			Total 75
REPORTED	Jan HARVEST	Feb AND	Mar TAKE BY	Apr SAMPL	May .ED HOU	SEHOL	DS (UN	EXPANDE	D)		-	Dec M	lonth	
REPORTED Harvest	Jan HARVEST 15	Feb AND 9	Mar TAKE BY 8	Apr SAMPL 9	May ED HOU 5	ISEHOL 8	DS (UNI	EXPANDE 0	D) 4	4	6	Dec M	lonth 0	75
REPORTED Harvest Struck & Lost	Jan HARVEST 15 1 16	Feb AND 9 6 15	Mar TAKE BY 8 0	Apr SAMPL 9 2 11	May ED HOU 5 0 5	ISEHOL 8 0	DS (UNI 0 0 0	EXPANDE 0 0	D) 4 0	4	6	7 0	0	75 9
REPORTED Harvest Struck & Lost Total Take	Jan HARVEST 15 1 16	Feb AND 9 6 15	Mar TAKE BY 8 0 8	Apr SAMPL 9 2 11	May ED HOU 5 0 5	SEHOL 8 0 8	DS (UNI 0 0 0	EXPANDE 0 0	D) 4 0	4	6	7 0	0	75 9
REPORTED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 15 1 16 HARVEST	Feb AND 9 6 15	Mar TAKE BY 8 0 8 TAKE BY	Apr SAMPL 9 2 11 COMM	May ED HOU 5 0 5	ISEHOL 8 0 8 EXPANI	DS (UNI 0 0 0 0	EXPANDE 0 0 0	D) 4 0 4	4 0 4	6 0 6	7 0 7	0 0 0	75 9 84
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 15 1 16 HARVEST 16.2	Feb AND 9 6 15 AND 9.7	Mar TAKE BY 8 0 8 TAKE BY	Apr SAMPL 9 2 11 COMM 97	May ED HOU 5 0 5 UNITY (SEHOL 8 0 8 EXPANI 86	DS (UNI 0 0 0 0 DED)	0 0 0 0	D) 4 0 4 4.3	4 0 4 4.3	6 0 6	7 0 7.5	0 0 0	75 9 84
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 15 1 16 HARVEST 16.2 11 17.3	Feb AND 9 6 15 AND 9.7 6 5 16.2	Mar TAKE BY 8 0 8 TAKE BY 8.6 0.0 86	Apr SAMPL 9 2 11 COMM 97 22 119	May .ED HOU 5 0 5 UNITY (1 5 4 0 0	8 0 8 EXPANI 86 00 86	DS (UNI 0 0 0 0 DED) 00 00	0 0 0 0 0	D) 4 0 4 4.3 0.0 4.3	4 0 4 4.3 0.0	6 0 6 6.5 0.0	7 0 7.5 0.0	0 0 0 0	75 9 84 80.9 9.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 15 1 16 HARVEST 16.2 11 17.3	Feb AND 9 6 15 AND 9.7 6 5 16.2	Mar TAKE BY 8 0 8 TAKE BY 8.6 0.0 86	Apr SAMPL 9 2 11 COMM 97 22 119	May ED HOU 5 0 5 UNITY (1 54 00 54	8 0 8 EXPANI 86 00 86	DS (UNI 0 0 0 0 DED) 00 00	0 0 0 0 0 0.0 0.0	D) 4 0 4 4.3 0.0 4.3	4 0 4 4.3 0.0 4 3	6 0 6 6.5 0.0	7 0 7.5 0.0	0 0 0 0	75 9 84 80.9 9.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 15 1 16 HARVEST 16.2 11 17.3 SEASONA	Feb AND 9 6 15 AND 9.7 6 5 16.2	Mar TAKE BY 8 0 8 TAKE BY 8.6 0.0 86	Apr SAMPL 9 2 11 COMM 97 22 119 HARVE	May ED HOU 5 0 5 UNITY (1) 54 00 54 CST AND	SEHOL 8 0 8 EXPANI 86 00 86	DS (UNI 0 0 0 0 DED) 00 00 00 BY CO	EXPANDE 0 0 0 0 0 0 0 MMUNITY	4 0 4 4 3 0 0 4 3 (EXPA	4 0 4 4.3 0.0 4.3 ANDED)	6 0 6 6.5 0.0 6 5	7 0 7 7.5 0.0 7.5	0 0 0 0	75 9 84 80.9 9.7 90.6
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 15 1 16 HARVEST 16.2 11 17.3 SEASONA 16.2	Feb AND 9 6 15 AND 9.7 6.5 16.2 LLY #	Mar TAKE BY 8 0 8 TAKE BY 8.6 0.0 86 ADJUSTED 8.6	Apr SAMPL 9 2 11 COMM 97 22 119 HARVE	May ED HOU 5 0 5 UNITY (1) 54 00 54 ST AND 54	8 0 8 EXPANI 86 00 86 TAKE 86	DS (UNI 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0.0 0.0 0.0 0.0 0.0 MMUNITY	4 0 4 4 3 0 0 4 3 (EXPA 4 3	4 0 4 4.3 0.0 43 ANDED)	6 0 6 6.5 0.0 6 5	7 0 7 7.5 0.0 7.5 7.5	0 0 0 0	75 9 84 80.9 9.7 90.6
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 15 1 16 HARVEST 16.2 11 17.3 SEASONA 16.2 1.1 17.3	Feb AND 9 6 15 AND 9.7 6.5 16.2 LLLY # 9.7 6.5 16.2	Mar TAKE BY 8 0 8 TAKE BY 8.6 0.0 86 ADJUSTED 8.6 0.0	Apr SAMPL 9 2 11 COMM 97 22 119 HARVE 97 22 119	May ED HOU 5 0 5 UNITY (1 54 00 54 ST AND 54 00	8 0 8 EXPANI 86 00 86 TAKE 86 00	DS (UNII 0 0 0 0 0 DED) 00 00 00 BY CO 00 00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4 0 4 4 3 0 0 4 3 (EXPA 4 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 0 4 4.3 0.0 4 3 NDED) 4 3	6 0 6 6.5 0.0 6 5	7 0 7 7.5 0.0 7.5 7.5 0.0 0.0	0 0 0 0	75 9 84 80.9 9.7 90.6 80.9 9.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take Total Take	Jan HARVEST 15 1 16 HARVEST 16.2 11 17.3 SEASONA 16.2 1.1 17.3	Feb AND 9 6 15 AND 9.7 6.5 16.2 LLLY # 9.7 6.5 16.2	Mar TAKE BY 8 0 8 TAKE BY 8.6 0.0 86 ADJUSTED 8.6 0.0 8.6	Apr SAMPL 9 2 11 COMM 97 22 119 HARVE 97 22 119	May ED HOU 5 0 5 UNITY (1) 54 00 54 EST AND 54 00 54	8 0 8 EXPANI 86 00 86 TAKE 86 00	DS (UNI 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4.3 0.0 4.3 0.0 4.3 (EXPA 4.3 0.0 4.3	4 0 4 4.3 0.0 4.3 NNDED) 4.3	6 0 6 6.5 0.0 6 5	7 0 7 7.5 0.0 7.5 7.5 0.0 7.5	0 0 0 0	75 9 84 80.9 9.7 90.6 80.9 9.7 90.6

SOURCE. Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of Angoon, 1995

Cum Take (%) 19.0% 36.9% 46 4% 59 5% 65.5% 75.0% 75 0% 75.0% 79.8% 64.5% 91.7% 100.0%

		Sea	Lion		Harbor Seal				
	Reporte	ed by	Communi	ty Est	Reporte	ed by	Commun	ity Est.	
	Samp	ole	(Expanded)		Sam	ple	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0	000	0.0		60	80.0%	64.7	80.0%	
Adult Female	0		0.0	***	9	12.0%	9.7	12.0%	
Adult Unknown Sex	0		0.0		1	1.3%	1.1	1.3%	
Juvenile Male	0		0.0		5	6.7%	5.4	6.7%	
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0	•••	0.0		0	0.0%	0.0	0.0%	
Pup Male	0		0.0		0	0.0%	0.0	0.0%	
Pup Female	0		0.0		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0	•••	0.0		0	0.0%	0.0	0.0%	
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%	
Female Unknown Age	0	•••	00	***	0	0.0%	0.0	0.0%	
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%	
Total	0		0.0		75	100.0%	80.9	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION					I	HARBO	R SEA	\L
	Struck/ Total						Struck/	Total
	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
	1992	0.0	0.0	0.0	1992	125.1	28.9	154.0
	1993	0.0	0.0	0.0	1993	56.6	9.9	66.5
	1994	0.0	0.0	0.0	1994	86.9	21 .I	88.0
	1995	0.0	0.0	0.0	1995	80.9	9.7	90.6

SOURCE Abska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals In Alaska, with assistance from the City of Angoon, 1995.

SAMPLING DESIGN:

CHAIN REFERRAL Total Referred Households 31

Surveyed Households 25
Sampling Fraction 80.6%

Sample Household Members 98
Estimated Household Members 121.5

HARVEST	AND	LISE	INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea Harbor and Take (Expanded): Sea Harbor Lion Seal Lion Seal used 0.0% 92.0% **Total Number Harvested** 0.0 69.4 Total Number Struck and Lost Hunted 0.0% 64.0% 0.0 13.6 Harvested 0.0% 60.0% Total Number Taken 0.0 63.1 Received 0.0% 48.0%

Gave Away 0.0% 480% Number Harvested Per Capita N/A N/A

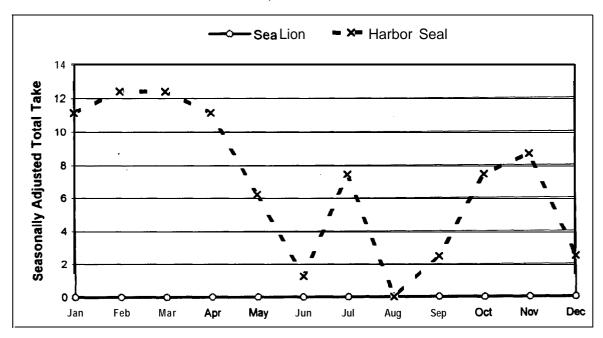
SEA LION	HARVE	ST B	Y MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HAI	RVEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	О	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0 0	0.0	00	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0 0	0 0	0 0	00	0 0	00	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0
Total Take	0.0	0 0	0 0	0 0	00	00	0.0	00	00	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0 0	0.0	0.0	00	0 0	0 0	0.0	0 0	0 0	0.0	0.0	0.0		0.0
Struck a Lost	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0	0.0	0.0		00
Total Take	0.0	0.0	0.0	00	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0		0.0
Total Take (%)				-	_,					~	-			
Cum Take	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)					•			_		***				
LIADDOD												11.		

HARBOR	SEAL F	IARVE	ST BY	MONT	Н							U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckl	Nov	Dec N	lonth	Total
REPORTED	HARVEST	AND 1	TAKE BY	SAMPL	ED HOU	JSEHOL	DS (UN	EXPAND	ED)					
Harvest	7	9	9	9	4	1	5	0	2	4	4	2	0	56
Struck & Lost	2	1	1	0	1	0	1	0	0	2	3	0	0	11
Total Take	9	10	10	9	5	1	6	0	2	6	7	2	0	67
ESTIMATED	HARVES	AND	TAKE BY	COMMI	JNITY (EXPAND	ED)							
Harvest	8.7	11.2	11.2	112	5 0	1.2	6.2	0.0	2.5	5.0	5.0	2.5	0.0	69.4
Struck & Lost	25	1.2	1.2	0 0	12	00	12	0.0	0.0	2.5	37	0.0	0.0	13.6
Total Take	11.2	12 4	124	11.2	62	12	7 4	0.0	2.5	7 4	0.7	2.5	0.0	03.1
ESTIMATED	SEASON	ALLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	8.7	11.2	11.2	11.2	50	12	62	0.0	2.5	5.0	5.0	2.5		694
Struck & Lost	2.5	1.2	1.2	0.0	1.2	0 0	12	0.0	0.0	2.5	3.7	0.0		13.6
Total Take	11.2	12.4	12.4	11.2	6.2	1.2	7.4	0.0	2.5	7.4	8.7	2.5		03.1
Total Take (%) 13.4%	14.9%	14.9%	134%	7.5%	1.5%	90%	00%	3.6%	9.0%	10.4%	3.0%		100.0%
Cum Take	11.2	23.6	36.0	47.1	533	54.6	62.0	62.0	64.5	71.9	60.6	63.1		
Cum. Take	` '	20.49		56.7%	642%	65.7%	74.6%	74.6%	77.6%	66.6%	97.0%	100.0%	or Cooks	a Alaski s

SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaski a, with assistance from the City of Craig and Shaan-Seet, Inc., 1995.

		Sea	Lion			Harbo	or Seal		
	Reporte	ed by	Commun	ity Esl.	Reporte	ed by	Commun	ity Est.	
	Sample		(Expen	ded)	Sam	ple	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		23	41.1%	28.5	41.1%	
Adult Female	0	-	0.0	_	15	26.8%	18.6	26.8%	
Adult Unknown Sex	0		0.0	***	7	12.5%	a.7	12.5%	
Juvenile Male	0	***	0.0		7	12.5%	0.7	12.5%	
Juvenile Female	0		0.0		2	3.6%	2.5	3.6%	
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Pup Male	0	•••	0.0		0	0.0%	0.0	0.0%	
Pup Female	0		00		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Male Unknown Age	0		0.0	***	0	0.0%	0.0	0.0%	
Female Unknown Age	0		0.0	_	0	0.0%	0.0	0.0%	
Unknown Sex and Age	0		0.0		2	3.6%	2.5	3.6%	
Total	0		0.0		56	100.0%	69.4	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST. STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			Н	ARBO	R SEA	
		Struck/	Total				Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Ye</u> :	ar	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0	199	92	74.2	0.0	74.2
1993	0.0	0.0	0.0	199	93	51 . 1	9.6	60.9
1994	0.0	0.0	0.0	199	94	42.7	6.6	49.3
1995	0.0	0.0	0.0	199	96	69. 4	13.6	83.1

SCURCE: Alaska Department of **Fish** and Game, **Division** of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with **assistance** from the City of Craig and **Shaan-Seet**, Inc., **1995**.

SAMPLING DESIGN: CHAIN REFERRAL

Total Referred Households
Surveyed Households
Sampling Fraction
Sample Household Members
77.0

HARVESTAND USE INFORMATION

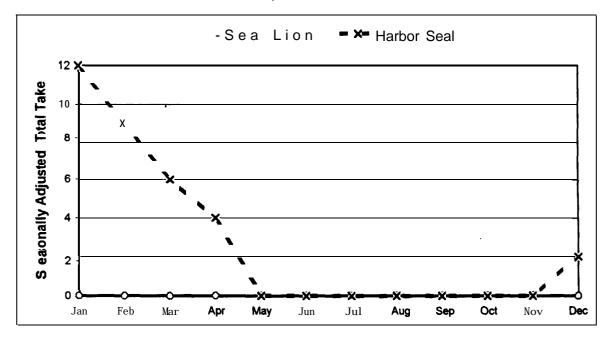
Estimated Community Harvest Percentage of Sample Households: and Take (Expanded): Sea Harbor Sea Harbor Lion Lion Seal Seal Used 0.0% 80.0% **Total Number Harvested** 0.0 24.0 Hunted 0.0% 48.0% **Total Number Struck and Lost** 0.0 9.0 Harvested 0.0% Total Number Taken 32.0% 33.0 Received 0.0% 60.0% Gave Away 0.0% Number Harvested Per Capita N/A 36.0% N/A

SEA LION	HARVE Jan	ST BY Feb	MONT Mar	TH Apr	Mov	lum	Jul	Au9	Sep	Oct	Nov		nknown ⁄lonth	Total
REPORTED HA				•	May	Jun		Auy	Seb	OCI	NOV	Dec II	лоппп	Total
Harvest	ARVEST AND) TAKE 1	O SAIVIFLI	.D 11003E	.nolds (i	JINEAFAINE ()) ()	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0′	0	0	0	0	0	. 0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
ESTIMATED	HARVEST	AND T	AKF BY	COMMU	NITY (F	XPANDEI	(ח	· ·		Ū	·	Ů	Ū	ŭ
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0 0	0 0	0 0	0.0	0 0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0 0	0 0	00	0.0	00	0.0	0.0
Total Take	0.0	0 0	0.0	0.0	0 0	0 0	00	0 0	0.0	0 0	0 0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVES	T AND	TAKE B	Y COM	MUNITY	(EXPAI	NDED)				
Harvest	0.0	0.0	0.0	0 0	00	0 0	00	0 0	0.0	00	0 0	0 0		0.0
Struck & Lost	0.0	0.0	00	0 0	00	0 0	00	00	00	0 0	0 0	0.0		0 0
Total Take	0.0	0.0	0.0	00	0 0	0 0	00	0 0	0 0	0.0	0 0	0.0		00
Total Take (%)														
Cum. Take	0 0	0.0	0.0	0.0	00	a0	00	00	0.0	0.0	0.0	0.0		
Cum Take (%)	***		***											
⊣HΔRRΩR	SEAL H	IΔRVE	ST RV	MONT	Н							1	Inknown	
HARBOR	SEAL H Jan	IARVE Feb	ST BY Mar	MONTI Apr	H May	Jun	Jul	Aug	Sep	Oct	Nov		Jnknown VI o n t h	Total
HARBOR	Jan	Feb	Mar	Apr	May					Oct	Nov			Total
_	Jan	Feb	Mar	Apr	May					Oct 0	Nov 0			Total 24
REPORTED	Jan HARVEST	Feb AND T	Mar AKE BY	Apr SAMPLE	May ED HOU	SEHOLD	S (UNE	XPANDE	D)			Dec 1	Month	
(REPORTED Harvest	Jan HARVEST	Feb AND T	Mar AKE BY 1	Apr SAMPLE	May ED HOU	SEHOLD:	S (UNE	XPANDE 0	E D)	0	0	Dec 1	Month 0	24
IREPORTED Harvest Struck & Lost	Jan HARVEST 11 1 12	Feb Tall Tall Tall Tall Tall Tall Tall Tal	Mar AKE BY 1 5	Apr SAMPLE 2 2 4	May ED HOU 0 0 0	SEHOLD: 0 0	0 0 0	XPANDE 0 0	0 0	0 0	0	2 0	0 0	24 9
IREPORTED Harvest Struck & Lost Total Take	Jan HARVEST 11 1 12	Feb Tall Tall Tall Tall Tall Tall Tall Tal	Mar AKE BY 1 5	Apr SAMPLE 2 2 4	May ED HOU 0 0 0	SEHOLD: 0 0 0	0 0 0	XPANDE 0 0	0 0	0 0	0	2 0	0 0	24 9
IREPORTED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 11 1 12 HARVEST	Feb Teb Teb Teb Teb Teb Teb Teb Teb Teb T	Mar AKE BY 1 5 6	Apr SAMPLE 2 2 4 COMMU	May D HOU 0 0 0 INITY [E	SEHOLD: 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	2 0 2	0 0 0	24 9 33
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 11 1 12 HARVEST 11.0	Feb a a 1 9 AND 7 AND 7 8.0	Mar AKE BY 1 5 6 FAKE BY	Apr SAMPLE 2 2 4 COMMU 2.0	May D HOU O O INITY [E	SEHOLDS 0 0 0 0 EXPANDE 00	0 0 0 0 0 D)	0 0 0 0	0 0 0 0	0 0 0	0 0 0	2 0 2	0 0 0	24 9 33 24.0
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 11 1 12 HARVEST 11.0 1.0 12.0	Feb Teb Teb Teb Teb Teb Teb Teb Teb Teb T	Mar AKE BY 1 5 6 FAKE BY 1.0 5.0 6.0	Apr SAMPLE 2 2 4 COMMU 2.0 2 0 4 0	May O O O INITY [E OO OO OO OO OO OO OO OO OO	0 0 0 0 XPANDE 00 00	O (UNE O O O O O O O O O O O O O O O O O O O	0 0 0 0 0	0 0 0 0 0 0.0 0.0	0 0 0 0.0 0.0	0 0 0	2 0 2 2.0 0.0	0 0 0 0	24 9 33 24.0 9.0
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 11 1 12 HARVEST 11.0 1.0 12.0	Feb Teb Teb Teb Teb Teb Teb Teb Teb Teb T	Mar AKE BY 1 5 6 FAKE BY 1.0 5.0 6.0	Apr SAMPLE 2 2 4 COMMU 2.0 2 0 4 0	May O O O INITY [E OO OO OO OO OO OO OO OO OO	0 0 0 0 XPANDE 00 00	O (UNE O O O O O O O O O O O O O O O O O O O	0 0 0 0	0 0 0 0 0 0.0 0.0	0 0 0 0.0 0.0	0 0 0	2 0 2 2.0 0.0	0 0 0 0	24 9 33 24.0 9.0
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 11 12 HARVEST 11.0 1.0 12.0 SEASONA	Feb Teb Teb Teb Teb Teb Teb Teb Teb Teb T	Mar TAKE BY 1 5 6 TAKE BY 1.0 5.0 6.0 DJUSTED	Apr SAMPLE 2 2 4 COMMU 2.0 2 0 4 0 HARVES	May ED HOU 0 0 0 INITY [E 00 00 ST AND	SEHOLDS 0 0 0 CXPANDE 00 00 TAKE E	S (UNE 0 0 0 0 D) 00 00 00	XPANDE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0.0 0.0 00 00	0 0 0 0.0 0.0 0.0 NDED)	0 0 0	2 0 2 2.0 0.0 2.0	0 0 0 0	24 9 33 24.0 9.0 330
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 11 12 HARVEST 11.0 1.0 12.0 SEASONA 11.0	Feb AND T a 1 9 AND 1 8.0 1.0 9.0 ALLY AE 8.0	Mar AKE BY 1 5 6 FAKE BY 1.0 5.0 6.0 DJUSTED 1.0	Apr SAMPLE 2 2 4 COMMU 2.0 20 40 HARVES	May O O O O INITY [E OO OO OO OO OO OO OO OO OO	SEHOLDS 0 0 0 XYPANDE 00 00 TAKE E	O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	XPANDE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0.0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0.0 NDED)	0 0 0 0.0 0.0 0.0	2 0 2 2.0 0.0 2.0	0 0 0 0	24 9 33 24.0 9.0 330 24.0
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take Total Take Total Take Total Take (%)	Jan HARVEST 11 12 HARVEST 11.0 1.0 12.0 SEASONA 11.0 1.0 12.0 36.4%	Feb AND T a 1 9 AND 1 8.0 1.0 9.0 ALLY AE 8.0 1.0 9.0 27.3%	Mar AKE BY 1 5 6 TAKE BY 1.0 5.0 6.0 DJUSTED 1.0 5.0 6.0 10.2%	Apr SAMPLE 2 2 4 4 COMMU 2.0 2 0 4 0 HARVES 2.0 2 0 4 0	May O O O INITY [E OO OO OO OO OO OO OO OO OO	SEHOLD: 0 0 0 0 XXPANDE 00 00 TAKE E 00 00 000	O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 00 00 00 (EXPA	0 0 0 0.0 0.0 0.0 NDED) 0.0	0 0 0 0.0 0.0 0.0 0.0	2 0 2.0 0.0 2.0 2.0 0.0 0.0	0 0 0 0	24 9 33 24.0 9.0 330 24.0 9.0
IREPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take Struck & Lost Total Take	Jan HARVEST 11 12 HARVEST 11.0 1.0 12.0 SEASONA 11.0 12.0 36.4% 12.0	Feb AND T a 1 9 AND 1 8.0 1.0 9.0 LLLY AI 8.0 1.0 9.0 27.3% 21.0	Mar AKE BY 1 5 6 TAKE BY 1.0 5.0 6.0 DJUSTED 1.0 5.0 6.0 10.2% 27.0	Apr SAMPLE 2 4 COMMU 2.0 2.0 4.0 HARVES 2.0 2.0 4.0 12.1% 31.0	May O O O O INITY [E OO OO OO ST AND OO OO OO OO 310	SEHOLD: 0 0 0 0 XYPANDE 00 00 TAKE E 00 00 00 00 31.0	S (UNE 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O O O O O O O O O O O O O O O O O O O	0 0 0 0.0 0.0 0.0 NDED) 0.0 0.0 0.0% 31.0	0 0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0%	2 0 2.0 0.0 2.0 2.0 6.1% 33.0	0 0 0 0	24 9 33 24.0 9.0 330 24.0 9.0 33.0

SOURCE: Abska Department of Fish and Came, Division of Subsintence, Subsintence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chilkat Indian Association, 1995

		Sea	Lion			Harbo	rSeal	
	Reporte	d by	Communit	y Est.	Reporte	ed by	Communi	ty Est.
	Samp	le	(Expand	ded)	Sam	ple	(Expan	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	_	1	4.2%	1.0	4. 2%
Adult Female	0		0.0		2	8. 3%	2.0	8. 3%
Adult Unknown Sex	0	•	0.0		7	29. 2%	7.0	29. 2%
Juvenile Male	0		00		0	0.0%	0.0	0.0%
Juvenile Female	0		0.0	***	4	167%	4.0	16. 7%
Juvenile Unknown Sex	0	•••	0.0		1	4. 2%	1.0	4. 2%
Pup Male	0		0.0	•	0	0.0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0	_	0.0	_	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0. 0%
Female Unknown Age	0		0.0	•••	0	0.0%	0.0	0. 0%
Unknown Sex and Age	0		0.0		9	37. 5%	9. 0	37. 5%
Total	0		0. 0	•••	24	100.0%	24. 0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			<u>HARBO</u>	R SEA	<u>\L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	30.5	7.9	38.4
1993	0.0	0.0	0.0	1993	23.0	2.3	25.3
1994	0.0	0.0	0.0	1994	39.3	2.2	41 .5
1995	0.0	0.0	0.0	1995	24.0	9.0	33.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence. **Subsistence** Study and **Monitor System** for Sea **Lions** and Harbor Seals in Alaska, with **assistance** from the Chilkat **Indian Association**, 1995.

CHAIN REFERRAL Total Referred Households 69

Surveyed Households 63 Sampling Fraction 91.3%

Sample Household Members 242 Estimated Household Members 265.0

HARVEST AND USE INFORMATION

Gave Away 0.0%

Percentage of Sample Households: Estimated Community Harvest

Sea Harbor and Take (Expanded): Sea Harbor Lion Lion Seal Seal **Total Number Harvested** used 0.0% 68.3% 0.0 236.6 Hunted 0.0% **Total Number Struck and Lost** 0.0 57.1% 19.7 Harvested 0.0% Total Number Taken 54.0% 0.0 256.3 Received 0.0% 36.5%

36.5% Number Harvested Per Capita N/A

N/A

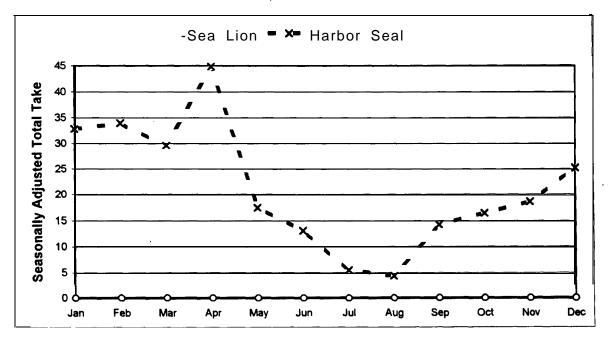
SEA LION HARVEST BY MONTH Unknown May Aug Sep Oct Nov Dec Month Total Jan Feb Apr Jui REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED) Harvest 0 0 0 0 0 0 0 Struck & Lost 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Total Take 0 0 0 0 0 0 0 ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest 0.0 0.0 0.0 0.0 0.0 00 00 0.0 0.0 0.0 0.0 0.0 Struck & Lost 0.0 0.0 00 00 00 0.0 00 00 0.0 0.0 00 0.0 0.0 0.0 Total Take 0.0 0.0 0.0 0.0 00 0.0 00 00 00 00 0.0 0.0 0.0 ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest 0.0 0.0 0.0 00 0.0 00 00 00 00 0.0 0.0 0.0 0.0 Struck & Lost 0.0 0.0 0.0 0.0 0.0 00 0.0 00 0.0 0.0 0.0 0.0 0.0 Total Take 0.0 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Take (%) Cum. Take 0.0 0.0 0.0 0.0 0.0 0.0 00 0.0 0.0 0.0 0.0 0.0 Cum Take(%)

HARBOR SEAL HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOL	DS (UN	IEXPANI	DED)					
Harvest	30	29	27	31	16	10	4	2	13	15	17	22	0	216
struck & Lost	0	2	0	10	0	2	1	2	0	0	0	1	0	18
Total Take	30	31	27	41	16	12	5	4	13	15	17	23	0	234
ESTIMATED	HARVEST	AND	TAKE BY	COM	MUNITY ((EXPAN	DED)							
Harvest	32.9	31.8	29.6	34.0	17.5	110	44	2.2	14.2	16.4	18.6	24.1	0.0	2366
Struck & Lost	0.0	2.2	0.0	11.0	0.0	22	11	2.2	0 0	0.0	0.0	11	0.0	19.7
Total Take	32.9	34.0	29.6	44.9	17.5	13.1	5 5	44	14.2	164	18.6	25.2	0.0	256.3
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	BY CO	OMMUNI	ГҮ (ЕХР	ANDED)				
Harvest	32.9	31.8	29.6	340	17.5	110	4 4	2.2	14.2	16.4	18.6	24 1		2366
Struck & Lost	0.0	2.2	0.0	11.0	0.0	2.2	11	2.2	0.0	0.0	0.0	11		197
Total Take	32.9	34.0	29.6	4.49	17.5	13 1	5.5	44	14.2	16.4	18.6	25.2		256.3
Total Take (%)	12.8%	13.2%	11.5%	17.5%	6.8%	5.1%	2 1%	1.7%	5.6%	6.4%	7.3%	9.8%		100.0%
Cum. Take	32.9	66.8	96.4	141.3	156.8	172.0	1774	181.8	196.0	212.5	231.1	256.3		
Cum. Take (%)	12.6%	26.1%	37.6%	551%	62.0%	67.1%	69.2%	70.9%	76.5%	62.9%	90.2%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Hoonah Traditional Council, 1995

7,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3L/	0	Lina			Horbo	r Cool	
		Sea	Lion			Harbo	r Seal	
	Reporte	ed by	Communi	ty Est.	Reporte	ed by	Communi	ty Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	_	0.0		131	60.6%	143.5	60.6%
Adult Female	0		0.0		36	16.7%	39.4	16.7%
Adult Unknown Sex	0		0.0		40	16.5%	43.0	16.5%
Juvenile Male	0		0.0		6	2.6%	6. 6	2. 0%
Juvenile Female	0		00		1	0.5%	11	0. 5%
Juvenile Unknown Sex	0	-	0.0		0	0.0%	0.0	0.0%
Pup Male	0		00		0	0.0%	0.0	0.0%
Pup Female	0		00		1	0.5%	1.1	0. 5%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0	•••	0.0	***	0	0.0%	0.0	0.0%
Female Unknown Age	0		00		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	***	0.0	_	1	0.5%	1.1	0. 5%
Total	0		0.0	***	216	100.0%	236. 6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u>-</u>	HARBO	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	350.2	24.0	375.0
1993	0.0	0.0	0.0	1993	324.4	35.6	360.2
1994	0.0	0.0	0.0	1994	240. 7	15.0	255. 8
1995	0.0	0.0	0.0	1995	236. 6	19. 7	256.3

SOURCE: Alaska Department of Fishand Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Hoonah Traditional Council, 1995.

CHAIN REFERRAL Total Referred Households 14

Surveyed Households 13
Sampling Fraction 92.9%

Sample Household Members 46
Estimated Household Members 49.5

HARVESTAND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea	Harbor	and Take (Expanded):	Sea	Harbor
Lion	<u>Seal</u>		Lion	Seal
used 0.0%	38.5%	Total Number Harvested	0.0	6.5
Hunted 0.0%	30.8%	Total Number Struck and Lost	0.0	0.0
Harvested 0.0%	3.8%	Total Number Taken	0.0	6.5
Received 0.0%	15.4%			
Gave Away 0.0%	30.8%	Number Harvested Per Capita	N/A	N/A

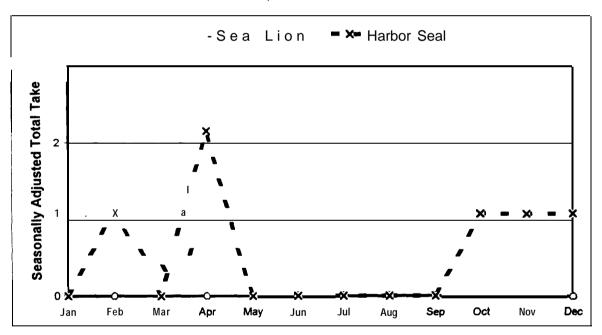
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPLI	ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (EXPAND	DED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0.0	0 0	0 0	0.0	00	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AI	DJUSTED	HARVI	EST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0 0	0.0	0.0	0 0	0 0	00	0 0	0 0	0.0	0 0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0 0	0 0	00	00	0 0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	00	0 0	0 0	0.0		0.0
Total Take (%)		***			***	-	•••							
Cum. Take	0.0	0.0	0.0	0.0	0.0	0 0	00	0 0	00	0 0	0.0	0.0		
Cum Take (%)				_		-		•••			-			
//A DD 0 D														

HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec.	Month	Total
TREPORTED	HARVEST	AND	TAKE BY	SAMPI	ED HOU	ISEHOL	DS (UN	EXPAND	ED)					
Harvest	0	1	0	2	0	0	0	0	0	1	1	1	0	6
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	1	0	2	0	0	0	0	0	1	1	1	0	6
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (I	EXPAND	DED)							
Harvest	0.0	1.1	0.0	2.2	0.0	0.0	0 0	00	00	11	1.1	1.1	0.0	6.5
Struck & Lost	0.0	0.0	0.0	0.0	00	0.0	0 0	00	0 0	0 0	0.0	00	00	0.0
Total Take	0 0	1.1	0.0	2.2	0.0	0 0	0 0	0 0	0 0	1.1	11	1.1	0.0	6.5
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	0.0	1.1	0.0	2.2	0 0	00	0 0	0.0	0.0	11	1.1	11		6.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	1.1	0.0	2.2	0.0	00	00	0 0	0.0	1.1	11	1.1		6.5
Total Take (%)	0.0%	16.7%	0.0%	333%	00%	0.0%	00%	00%	0.0%	16.7%	16.7%	16.7%		100.0%
Cum. Take	0.0	11	1.1	3.2	3.2	3.2	3.2	3.2	3.2	4.3	5.4	6.5		
Cum. Take (%)	0.0%	16.7%	16.7%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	667%	83.3%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence, Subsistence, Study and Maniford Alaska, In Alaska,

		Sea	Lion			Harbo	or Seal	
	Reporte	ed by	Communit	y Est.	Report	ed by	Commur	ity Est.
	Samı	ole	(Expan	ded)	Sam	ple	(Expa	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	***	0.0		6	100.0%	6.5	100.0%
Adult Female	0		0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0	•	0	0.0%	0.0	0.0%
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Pup Male	0		0.0	440	0	0.0%	0.0	0.0%
Pup Female	0		0.0	****	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0	_	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0	***	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	***	0.0		0	0.0%	0.0	0.0%
Total	0	٠	0. 0		6	100.0%	6.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION			HARBO	R SEA	\L
Struck	√ Total			Struck/	Total
irvest Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>
0.0 0.0	0.0	1992	30.0	2.1	32.1
0.0	0.0	1993	14.0	0.0	14.0
0.0 0.0	0.0	1994	10.0	0.0	10.0
0.0 0.0	0.0	1995	6.5	0.0	6.5
	Struck (1.05) (1.00) (1	Struck/ Total National Column	Struck/ Total rivest Lost Take Year 0.0 0.0 0.0 1992 0.0 0.0 0.0 1993 0.0 0.0 0.0 1994	Struck/ Total rivest Lost Take Year Harvest 0.0 0.0 0.0 1992 30.0 0.0 0.0 0.0 1993 14.0 0.0 0.0 0.0 1994 10.0	Struck/ Total Struck/ greest Lost Take Year Harvest Lost 0.0 0.0 0.0 1992 30.0 2.1 0.0 0.0 0.0 1993 14.0 0.0 0.0 0.0 0.0 1994 10.0 0.0

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Hydaburg and Haii Corporation, 1995

CHAIN REFERRAL Total Referred Households 82

Surveyed Households 65 Sampling Fraction 79.3%

Sample Household Members 205 Estimated Household Members 258.6

HARVESTAND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

,				
Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	Seal		Lion	Seal
Used 0.0%	44.6%	Total Number Harvested	0.0	42.9
Hunted 0.0%	27.7%	Total Number Struck and Lost	0.0	1.3
Harvested 0.0%	21.5%	Total Number Taken	0.0	44.2
Received 0.0%	33.8%			
Gave Away 0.0%	246%	Number Harvested Per Capit	a N/A	N/A

SEA LION HARVEST BY MONTH Unknown														
_	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aua	Seo	Oct	Nw	Dec M	onth	Total
REPORTED HAR	RVEST AND	TAKE	B Y SAMPLI	ED HOUS	SEHOLDS	(UNEXPAI	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
ESTIMATED I	HARVEST	AND	TAKE BY	COMM	UNITY	(EXPAND	ED)	•						
Harvest	0.0	0.0	00	0 0	00	0 0	0 0	0.0	0.0	00	0.0'	0. 0	0.0	0.0
Struck & Lost	0.0	0 0	00	00	00	0 0	0 0	0.0	0 0	0.0	0.0	00	0.0	00
Total Take	0.0	0.0	0.0	00	00	0 0	00	0.0	00	0.0	0.0	0. 0	0.0	0.0
ESTIMATED S	SEASONA	LLY AI	DJUSTED	HARVE	ST ANI	D TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	00	0 0	00	0 0	00	0.0	0.0	0 0	0.0	0. 0		0.0
Struck & Lost	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0. 0		0.0
Total Take	0 0	'0.0	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)			•		_							***		
Cum Take	0.0	0.0	0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Take(%)			-					***	667	***	-			
HARBOR	CEAL II		CT DV	1401	TII							n.	nknown	

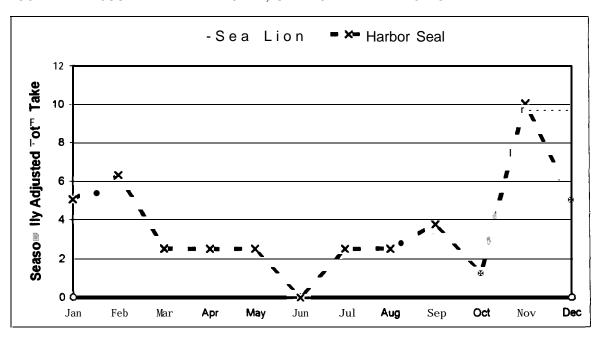
HARBOR	SEAL H	IARVE	ST BY	MON	TH								Unknown	
<u></u>	Jan	Feb	Mar	Apr	May	Jun	jul	Aug	Sep	Ckt	Nw	Dec	Month	Total
REPORTED	HARVEST	AND T	AKE BY	SAMP	LED HOU	SEHOLD	S (UNE	XPANDE	ED)					
Harvest	3	5	2	2	2	0	2	2	3	1	a	4	0	34
Struck & Lost	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Take	4	5	2	2	2	0	2	2	3	1	a	4	0	35
ESTIMATED	HARVEST	AND T	AKE BY	COMM	IUNITY (E	EXPANDE	ED)							
Harvest	3.0	63	2.5	25	25	0 0	25	2.5	3.8	1.3	10 1	5.0	0.0	42.9
Struck & Lost	1.3	0.0	0.0	0 0	0 0	0 0	00	0.0	0 0	0.0	0 0	0.0	0.0	1.3
Total Take	5.0	6.3	2.5	25	25	00	25	25	38	1.3	10 1	5.0	0.0	44.2
ESTIMATED	SEASONA	LLY A	JUSTED	HARVI	EST AND	TAKE	BY COM	IMUNITY	(EXP	ANDED)				
Harvest	3.8	63	2.5	25	25	0 0	25	25	38	1.3	10 1	5.0		42.9
Struck & Lost	1.3	0 0	0.0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0		1.3
Total Take	5.0	6.3	2.5	25	2 5	0 0	25	25	38	1.3	to.1	5.0		44.2
Total Take (%)	11.4%	14.3%	5.7%	57%	5.7%	00%	57%	51%	8.6%	2.9%	22.9%	11.4%		100.0%
Cum Take	5.0	11.4	13.9	164	la9	la9	21 4	24.0	27.8	29.0	39.1	44.2		
Cum. Take	(%) 11.49	% 257%	31.4%	311%	42 9%	42 9%	48.6%	54.3%	62.9%	65.7%	88.6%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seats in Alaska. with assistance from the Tlingit and Haida Central Council, Sealaska, Auke Tribe Council, and ANB/ANS, 1995.

HARVEST BY AGE AND SEX

		sea	Lion			Harbo	rSeal	
	Reporte	ed by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Sam	ple	(Expanded)		Sam	ple	(Ехраг	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	***	0.0	***	19	55.9%	24. 0	55. 9%
Adult Female	0	•••	0.0		4	11.0%	5.0	11.8%
Adult Unknown Sex	0	***	00		8	23.5%	I0 1	23.5%
Juvenile Male	0		00	_	1	2. 9%	1.3	2.9%
Juvenile Female	0		00	-	1	2.9%	1.3	2.9%
Juvenile Unknown Sex	0		0.0	***	1	2.9%	1.3	2. 9%
Pup Male	0		0.0		0	0. 0%	0.0	0.0%
Pup Female	0	•••	00		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0 0		0	0.0%	0.0	0.0%
Male Unknown Age	0		00	***	, 0	0.0%	0.0	0.0%
Female Unknown Age	0	•••	00	***	0	0.0%	0.0	0.0%
Unknown Sex and Age	, 0		0.0		0	0.0%	0.0	0.0%
Total	0		0.0		34	100.0%	42.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	<u>L</u>
		Struck/	Total			Struck	/ Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	122. 6	7. 6	130. 2
1993	0.0	0.0	0.0	1993	69.0	21.6	60.6
1994	1.1	0.0	1.1	1994	70.6	13. 5	92.1
1995	0.0	' 0. 0	0.0	1995	42.9	1.3	44. 2

SOURCE: Alaska Department of Fish and Game, Diin of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Tlingit and Haida Central Council, Seal aska, Auke Tribe Council, and ANB/ANS, 1995.

CHAIN REFERRAL Total Referred Households 72
Surveyed Households 49

Sample Household Members 202
Estimated Household Members 296.8

HARVEST AND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

	Sea	Harbor	and Take (Expanded):	Sea	Harbor
	<u>Lion</u>	Seal		Lion	<u>Seal</u>
used	0.0%	65.3%	Total Number Harvested	0.0	72.0
Hunted	0.0%	36.7%	Total Number Struck and Lost	0.0	1.5
Harvested	0.0%	34.1%	Total Number Taken	0.0	73.5
Received	0.0%	44.9%			
Gave Away	0.0%	34.7%	Number Harvested Per Capita	N/A	N/A

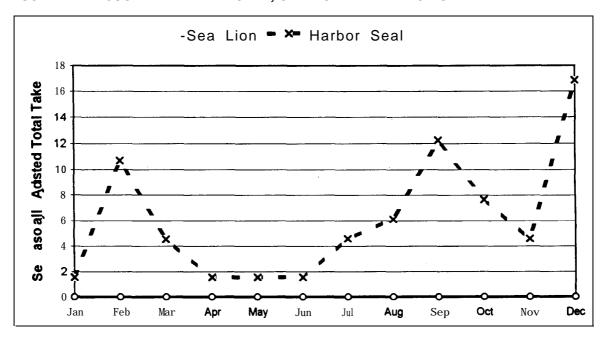
SEA LION	HARVE	STBY	/ MON	TH								Ur	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec M	onth	Total
REPORTED HAI	RVEST AND	TAKE E	BY SAMPLI	ED HOUS	EHOLDS	(UNEXPAI	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (E	XPAND	ED)							
Harvest	0 0	0.0	0.0	00	0.0	0.0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0 0	0 0	0.0	0 0	0.0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0 0	0.0	00	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0		00
T ota l Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0		0.0
Total Take (%)	•				•••									
Cum Take	0.0	00	0 0	00	0.0	0.0	0.0	0.0	00	0 0	0.0	0.0		
Cum Take (%)		***					•••	-						

HARBOR	SEAL F	IARVE	ST BY	MON	TH							Į	Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Cd	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	LED HO	USEHOL	.DS (UN	IEXPANI	DED)					
Harvest	1	7	2	1	1	1	3	4	8	5	3	11	2	49
Struck & Lost	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Take	1	7	3	1	1	1	3	4	8	5	3	11	2	50
ESTIMATED	HARVEST	AND	TAKE BY	COMN	IUNITY	(EXPANI	DED)							
Harvest	1.5	10.3	2.9	1.5	1.5	1.5	44	5.9	11.8	7.3	4.4	16.2	2.9	72.0
Struck & Lost	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Total Take	1.5	10.3	4.4	1.5	1.5	1.5	4 4	5.9	11.8	7.3	4.4	16.2	2.9	73.5
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARV	EST AN	D TAKE	BY CO	MMUNI	ГҮ (ЕХР	ANDED)				
Harvest	1.5	107	3.1	1.5	1.5	1.5	46	61	123	7.7	4 6	16.9		72.0
Struck & Lost	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.5
Total Take	1.5	10.7	4.5	1.5	1.5	1.5	46	6.1	12.3	7.7	4.6	16.9		73.5
Total Take (%)	2.1%	14.6%	6.2%	2.1%	2.1%	2 1%	6.3%	8.3%	16.7%	10 4%	6.3%	22.9%		100.0%
Cum. Take	1.5	12.3	16.8	18.3	199	21 4	26.0	32 1	444	52.0	56.6	73.5		
Cum. lake (%)		16.7%		24.9%	27.0%	29.1%	35.4%	43.1%	60.4%	70.8%	77.1%	100.0%		

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for See Liis and Harbor Seals in Alask with assistance from the Organized Village of Kake and City of Kake, 1995

		Sea	Lion			Harbo	r Seal	
	Reporte	d by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Samo	ole	(Expan	ded)	Sam	ple	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		30	61.2%	44.1	61.2%
Adult Female	0		0.0		7	14.3%	10.3	14.3%
Adult Unknown Sex	0		0.0	_	2	4. 1%	2.9	4.1%
Juvenile Male	0		0.0	_	10	204%	14.7	20.4%
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Pup Male	0	•••	0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0	***	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0	•••	0 0	_	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	•••	0.0		0	0.0%	0.0	0.0%
Total	0		0.0	•••	49	1000%	72.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			<u>H</u>	ARBO	R SEA	<u> </u>
		Struck/	Total				Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Y</u>	'ear	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	19	992	173.9	12.3	186.2
1993	0.0	0.0	0.0	19	993	100.8	15.2	115.9
1994	1.2	0.0	1.2	19	994	99. 3	7. 4	106.6
1995	0.0	0.0	0.0	1	995	72. 0	1.5	73.5

SOURCE Alaska Department of Fish and Game, Division of Subsistence. Subsistence Study and Monitor System for Sea Lions and Harbor Seals In Alaska, with assistance from the Organized Village of Kake and City of Kake, 1995

Table 8. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Ketchikan, 1995

CHAIN REFERRAL Total Referred Households 19

Surveyed Households 9
Sampling Fraction 47.4%
Sample Household Members 21

44.3

Estimated Household Members

HARVEST AND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

and Take (Expanded): Sea Harbor Sea Harbor **Lion** <u>Seal</u> Lion Seal Used 0.0% 22.2% **Total Number Harvested** 0.0 46.4 Hunted 0.0% **Total Number Struck and Lost** 0.0 22.2% 0.0 Harvested 0.0% Total Number Taken 22.2% 46.4 Received 0.0% 0.0%

Gave Away 0.0% 11 1% Number Harvested Per Capita N/A N/A

		CT D'		'LJ									Halina a · · · · ·	
SEA LION	<i>IHARVE</i> Jan	SIBY Feb	Mar	ri Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown M o n t h	Total
REPORTED HA	RVFST AND	TAKE B	Y SAMPLE					- 3						
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	, 0	0	0	0	0	. 0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	΄0	0
ESTIMATED	HARVEST	AND T	AKE BY	СОММ	UNITY (EXPAND	ED)							
Harvest	0.0	0 0	0.0	0 0	00	0 0	00 -	00	00	0 0	0.0	0.0	00	0.0
Struck & Lost	0.0	0 0	0 0	0 0	0 0	0 0	0 0	00	00	0 0	0.0	0.0	0.0	00
Total Take	0.0	00	0 0	00	00	00	00	00	00	00	0 0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	0.0	0.0	0.0	0.0	00	00	00	00	00	0.0	0.0	0 0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0 0	00	0.0	0 0	0 0	0 0		0.0
Total Take	0.0	0.0	0.0	0.0	00	00	00	00	00	0 0	0.0	0.0		0 0
Total Take (%)		•••	***		***				***					
Cum. Take	0.0	0 0	0.0	0.0	00	00	00	00	00	0.0	0 0	0.0		
Cum. Take(%)			***		_		•••							
$\Box \land DD \cap D$	SEAL L	IADVE	CT DV	$M \cap M$	TU								Unknown	
HARBOR	SEAL H Jan	ARVE Feb	ST BY Mar	MONT Apr	TH May	Jun	Jul	Aug	Sep	Cct	Nov		Unknown M o n t h	Total
HARBOR REPORTED	Jan	Feb		Apr						Cct	Nov			Total
	Jan	Feb	Mar	Apr	May					Cct 0	Nov 4			Total
REPORTED	Jan HARVEST	Feb AND T	Mar AKE BY	Apr SAMPL	May ED HO	JSEHOL	DS (UN	IEXPAND	DED)			Dec	Month	
REPORTED Harvest	Jan HARVEST 5	Feb AND T	Mar AKE BY 4	Apr SAMPL 4	May ED HOU	JSEHOL 0	DS (UN	IEXPANI 0	DED) 0	0	4	Dec 0	<u>Month</u> 0	22
REPORTED Harvest Struck & Los!	Jan HARVEST 5 0 5	Feb AND T 5 0 5	Mar AKE BY 4 0 4	Apr SAMPI 4 0 4	May LED HOU 0 0	JSEHOL 0 0 0	DS (UN 0 0 0	EXPANE 0 0	DED) 0 0	0	4 0	0 0	0 0	22 0
REPORTED Harvest Struck & Los! Total Take	Jan HARVEST 5 0 5	Feb To	Mar AKE BY 4 0 4	Apr SAMPI 4 0 4	May LED HOU 0 0	JSEHOL 0 0 0	DS (UN 0 0 0	EXPANE 0 0	DED) 0 0	0	4 0	0 0	0 0	22 0
REPORTED Harvest Struck & Los! Total Take ESTIMATED	Jan HARVEST 5 0 5 HARVEST	Feb To The Section 1 To	Mar AKE BY 4 0 4 AKE BY	Apr SAMPI 4 0 4 COMM	May LED HOU 0 0 0 UNITY (JSEHOL 0 0 0	DS (UN 0 0 0 0	EXPAND 0 0	DED) 0 0 0	0 0 0	4 0 4	0 0 0	0 0 0	22 0 22
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest	Jan HARVEST 5 0 5 HARVEST 10.6	Feb T T T T T T T T T T T T T T T T T T T	Mar AKE BY 4 0 4 AKE BY 8.4	Apr SAMPI 4 0 4 COMM 8 4	May LED HOU 0 0 UNITY (JSEHOL 0 0 0 EXPANI 00	DS (UN 0 0 0 0 DED)	EXPANI 0 0 0	DED) 0 0 0	0 0 0	4 0 4	0 0 0 0	0 0 0 0	22 0 22 464
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 5 0 5 HARVEST 10.6 0.0 10.6	Feb / T	Mar AKE BY 4 0 4 AKE BY 8.4 0 0 8.4	Apr SAMPI 4 0 4 COMM 8 4 0 0 8 4	May LED HOU 0 0 0 UNITY (00 00 00 00 00 00 00	0 0 0 0 EXPANI 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0	OED) 0 0 0 0 00 00	0 0 0 0.0 0.0	4 0 4 8 4 0 0 8 4	0 0 0 0	0 0 0 0	22 0 22 464 0.0
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 5 0 5 HARVEST 10.6 0.0 10.6	Feb / T	Mar AKE BY 4 0 4 AKE BY 8.4 0 0 8.4	Apr SAMPI 4 0 4 COMM 8 4 0 0 8 4	May LED HOU 0 0 0 UNITY (00 00 00 00 00 00 00	0 0 0 0 EXPANI 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	OED) 0 0 0 0 00 00	0 0 0 0.0 0.0	4 0 4 8 4 0 0 8 4	0 0 0 0	0 0 0 0	22 0 22 464 0.0
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 5 0 5 HARVEST 10.6 0.0 10.6 SEASONA	Feb	Mar 4 0 4 AKE BY 8.4 0 0 8.4 DJUSTED	Apr	May LED HOU 0 0 0 UNITY (00 00 0.0	JSEHOL 0 0 0 EXPANI 00 00 00 TAKE	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0 0	4 0 4 8 4 0 0 8 4	0 0 0 0 0.0 0.0	0 0 0 0	22 0 22 464 0.0 46.4
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 5 0 5 HARVEST 10.6 0.0 10.6 SEASONA 10.6	Feb AND T 5 AND T 10.6 0 0 10.6 LLLY AE 10.6	Mar AKE BY 4 0 4 AKE BY 8.4 0 0 8.4 DJUSTED 8 4	Apr	May LED HOL 0 0 0 UNITY (00 0.0 EST AND	0 0 0 0 EXPANI 00 00 00 0 TAKE	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 00 00 00 00 00	00 00 00 TY (EXP 00	0 0 0.0 0.0 0.0 0 0 ANDED)	4 0 4 8 4 0 0 8 4	0 0 0 0 0.0 0.0 0.0	0 0 0 0	22 0 22 464 0.0 46.4
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 5 0 5 HARVEST 10.6 0.0 10.6 SEASONA 10.6 0 0 10.6	Feb AND T 5 0 5 AND T 10.6 0 0 10.6 LLLY AD 10.6 0.0 10.6	Mar AKE BY 4 0 4 AKE BY 8.4 0 0 8.4 DJUSTED 8 4 0 0 8 4	Apr	May LED HOU 0 0 0 UNITY (00 0.0 EST AND 0.0	JSEHOL 0 0 0 0 EXPAND 00 00 00 TAKE 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 00 00 00 00 00 00 00 00	OED) 0 0 0 00 00 00 FY (EXP 00 0.0	0 0 0.0 0.0 0.0 0 0 ANDED)	4 0 4 8 4 0 0 8 4	0 0 0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22 0 22 464 0.0 46.4 464 0.0
REPORTED Harvest Struck & Los! Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 5 0 5 HARVEST 10.6 0.0 10.6 SEASONA 10.6 0 0 10.6	Feb AND T 5 0 5 AND T 10.6 0 0 10.6 LLLY AD 10.6 0.0 10.6	Mar AKE BY 4 0 4 AKE BY 8.4 0 0 8.4 DJUSTED 8 4 0 0 8 4	Apr	May LED HOU 0 0 0 UNITY (00 0.0 EST AND 0.0 0.0	JSEHOL 0 0 0 0 EXPANI 00 00 00 TAKE 00 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 00 00 00 00 00 00 00 00 00 00	OED) 0 0 0 00 00 00 TY (EXP 00 0.0 0.0	0 0 0.0 0.0 0.0 0 0 ANDED) 0.0	4 0 4 84 00 84 84	0 0 0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22 0 22 464 0.0 46.4 464 0.0 46.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ketchikan IRA Council and Ketchikan Indian Corporation, 1995.

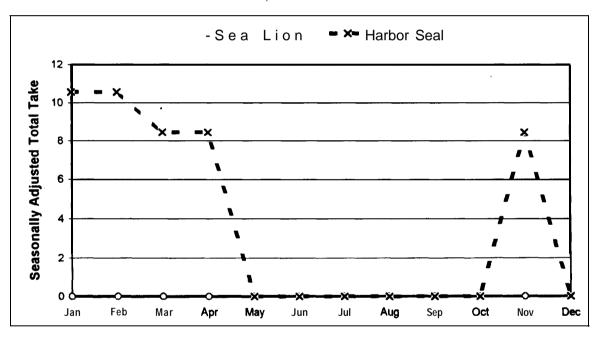
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HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	r Seal	
	Reporte	d by	Communi	ty Est.	Report	ed by	Commu	nity Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Ехраг	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		12	54.5%	25.3	54.5%
Adult Female	0	***	0.0		10	45.5%	21.1	45.5%
Adult Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%
Pup Male	0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0	on _e	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0	***	0	0.0%	0.0	0.0%
Female Unknown Age	0	_	0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	***	0.0		0	0.0%	0.0	0.0%
Total	0		0.0	•••	22	100.0%	46.4	100.0%

Hambar Cool

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		 <u> </u>	IARBOI	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	90.2	6.5	98.8
1993	0.0	0.0	0.0	1993	42.4	2.9	46.3
1994	0.0	0.0	0.0	1994	31.4	0.0	31.4
1995	0.0	0.0	0.0	1995	46.4	0.0	46.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Ketchikan IRA Council and Ketchikan Indian Corporation, 1995

Cum Take

Take(%)

60.0

22.7%

105.0

39.8%

135.0

51.2%

CHAIN REFERRAL Total Referred Households 25
Surveyed Households 20
Sampling Fraction 60.0%

Sample Household Members 72 Estimated Household Members 90.0

HARVESTAND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

and Take (Expanded): Sea Harbor Sea Harbor Lion <u>Seal</u> Lion <u>Seal</u> Used 0.0% 95.0% Total Number Harvested 0.0 263.8 Hunted 0.0% 90.0% Total Number Struck and Lost 0.0 0.0 Harvested 0.0% 75.0% Total Number Taken 0.0 263.8

Received 0.0% 35.0%

Gave Away 0.0% 65.0% Number Harvested Per Capita N/A N/A

SEA LION					Mari	lum	ll	A	Con	04	Na		nknown	Total
DEDODTED HA	Jan	Feb	Mar DV CAMDLE	Apr	May	Jun	Jul NDED)	Aug	Sep	Oct	Nov	Dec IV	lonth	Total
REPORTED HA					•		,	•	•	•	•	•	^	٠.
Harvest 8 L and	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	•	_	_	_
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED			TAKE BY		•	XPAND	•							
Harvest	0.0	0.0	00	0 0	0 0	00	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0
Struck & Lost	0 0	0.0	0.0	00	00	00	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MUNIT	Y (EXP	ANDED)				
Harvest	0.0	0 0	0.0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0 0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)					***									
Cum Take	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)		•••					-	_	_	***		_		
HARBOR	SEAL H	IA DVI	EST DV	MONE	TU								nknown	
HANDON	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		/lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	ED HOU	SEHOL	.DS (UN	EXPAND	ED)					
Harvest	48	36	24	0	0	0	4	2	2	20	27	40	0	211
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	40	36	24	0	0	0	4	2	2	20	27	40	0	211
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPANI	DED)							
Harvest	60.0	45.0	30.0	0.0	0 0	0 0	5.0	2.5	2.5	35.0	33.8	50.0	0.0	283.8
Struck & Lost	0.0	0.0	0.0	0.0	00	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	60.0	45.0	30.0	0.0	0.0	0 0	5 0	2.5	2.5	35.0	33.8	50.0	0.0	283.8
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	60.0	45.0	30.0	0 0	0.0	00	5 0	2 5	2.5	35.0	33.8	50.0		263.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	60.0	45.0	30.0	0.0	0 0	0.0	5.0	2.5	2.5	35.0	33.8	50.0		263.0
TotalTak	e 22.7% 17	7.1%	11.4%	0.0%	0.0%	0.0%	1.9%	0.9%	0.9%	13.3%	12.8%	19.0%		100.0%

SOURCE. Alaska Department of Fish and Game, Division of Subsistence. Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska with assistance from the Klawock Cooperative Association and Klawock Heenya Corporation, 1995.

140.0

53.1%

142.5

54.0%

145.0

55.0%

180.0

68.2%

213.8

81.0%

263.8

100.0%

135.0

51.2%

135.0

51.2%

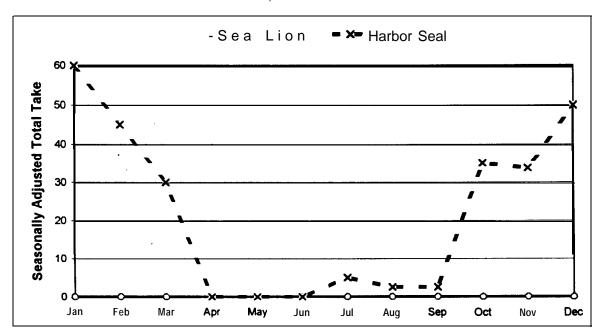
135.0

51.2%

		Sea	Lion		HarborSeal						
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.			
	Samp	ole	(Expan	ded)	Sam	ple	(Expar	nded)			
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0		0.0	_	120	60.7%	160.0	60.7%			
Adult Female	0		0.0	_	28	13.3%	35.0	13.3%			
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%			
Juvenile Male	0	-	0.0		5	2.4%	6.3	2.4%			
Juvenile Female	0		0.0		6	2.6%	7.5	2.6%			
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%			
Pup Male	0		0.0	•••	0	0.0%	0.0	0.0%			
Pup Female	0		0.0		0	0.0%	0.0	0.0%			
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%			
Male Unknown Age	0		0.0		15	7.1%	10.0	7.1%			
Female Unknown Age	0		00		10	8.5%	22.5	8.5%			
Unknown Sex and Age	0		0.0		11	5.2%	13.6	5.2%			
Total	0		0.0		211	100.0%	263.8	100.0%			

11-4--0--1

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	<u>۱</u>
		Struck/	Total			Struck	k/ Total
Year	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	1.4	0.0	1.4	1992	39.0	1.4	40.3
1993	0.0	0.0	0.0	1993	39.8	0.0	39.8
1994	0.0	0.0	0.0	1994	71.1	0.0	71.1
1995	0.0	0.0	0.0	1995	283.8	0.0	X3.8

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for See Liins and Harbor Seals in Alaska, with assistance from the Klawock Cooperative Association and Klawock Heenya Corporation, 1995.

CHAIN REFERRAL **Total Referred Households** 16 Surveyed Households 5 Sampling Fraction 31.3%

Sample Household Members 21 **Estimated Household Members** 67.2

Estimated Community Harvest Percentage of Sample Households: and Take (Expanded): Sea Harbor Sea Harbor Lion Lion <u>Seal</u> Seal **Used** 0.0% 100.0% Total Number Harvested 0.0 36.2

Hunted 0.0% 60.0% Total Number Struck and Lost 0.0 6.4 Harvested 0.0% Total Number Taken 60.0% 41.6 60.0%

Received 0.0%

Number Harvested Per Capita N/A Gave Away 0.0% N/A 40.0%

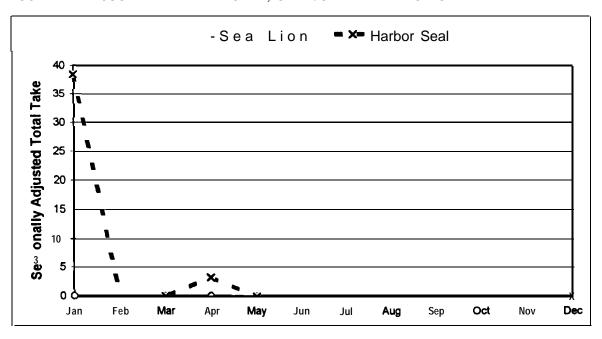
SEA LION	HARVE	ST B	Y MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jut	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HDUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0 0
Struck & Lost	0 0	0.0	0.0	0 0	0.0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0 0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0 0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		_	•••							_				
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0		
Cum Take (%)	_			***	_		-			••-				
LIABBOD														

HARBOR	SEAL H	'ARVE	ST BY	MON	TH							Un	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED I	HARVEST	AND	TAKE BY	SAMPL	LED HO	USEHOL	DS (UNE	EXPANDE	D)					
Harvest	10	0	0	1	0	0	0	0	0	0	0	0	0	11
Struck & Lost	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	12	0	0	1	0	0	0	0	0	0	0	0	0	13
ESTIMATED	HARVES1	r AND	TAKE BY	COMN	1UNITY	(EXPAND)ED)							
Harvest	32.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2
Struck & Lost	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
Total Take	364	0 0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AN	ID TAKE	BY COI	MMUNITY	(EXPA	ANDED)				
Harvest	32.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		36.2
Struck & Lost	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		6.4
Total Take	364	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0		41.6
Total Take (%)	923%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	36.4	38.4	38.4	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6		
Cum. Take(

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska. with assistance from the Chilkat Indian Village, 1995

7,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>5</i>	Sea	Lion		Harbor Seal				
	Reporte Samp	•	Community (Expande		Reporte Sam	•	Commun (Expar	•	
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0	***	0.0	_	0	0.0%	0.0	0.0%	
Adult Female	0		0.0		0	0.0%	0.0	0.0%	
Adult Unknown Sex	0		0.0		1	9.1%	3.2	9 1%	
Juvenile Male	0		0.0		2	18.2%	6.4	18.2%	
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Pup Male	0		0.0		0	0.0%	0.0	0.0%	
Pup Female	0		0.0		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%	
Female Unknown Age	0		0.0	***	0	0.0%	0.0	0.0%	
Unknown Sex and Age			0.0		8	72.7%	25.6	72.7%	
Total	0		0.0		11	100.0%	35.2	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBOR SEAL						
		Struck/	Total			Struck/	Total				
<u>Yea</u>	r <u>Harvest</u>	Lost	Take	<u>Ye</u>	ear	<u>Harvest</u>	Lost	Take			
199	2 0.0	0.0	0.0	19	992	8.0	2.0	10.0			
199	3 0.0	0.0	0.0	19	993	1.2	0.0	1.2			
199	4 0.0	0.0	0.0	19	994	3.8	1.3	5.0			
199	5 0.0	0.0	0.0	19	995	35.2	8.4	41.8			

SOURCE- Alaska Department of Fish and Game, **Division** of Subsistence, Subsistence **Study** and Monitor Syslem for Sea Lions and Harbor Seals **In** Alaska, with **assistance** from the Chilkal Indian **Village**, **1995**.

Table 11. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Pelican, 1995

CHAIN REFERRAL Total Referred Households 18
Surveyed Households 16
Sampling Fraction 88.9%

Sample Household Members 53
Estimated Household Members 59.6

HARVESTAND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea Harbor and Take (Expanded): Sea Harbor <u>Lion</u> Seal Lion Seal used 0.0% Total Number Harvested 87.5% 0.0 13.5 Hunted 0.0% 438% Total **Number** Struck and Lost 0.0 0.0 Harvested 0.0% 43.8% Total Number Taken 0.0 13.5 Received 0.0% 50.0% Gave Away 0.0% 43.8% Number Harvested Per Capita N/A N/A

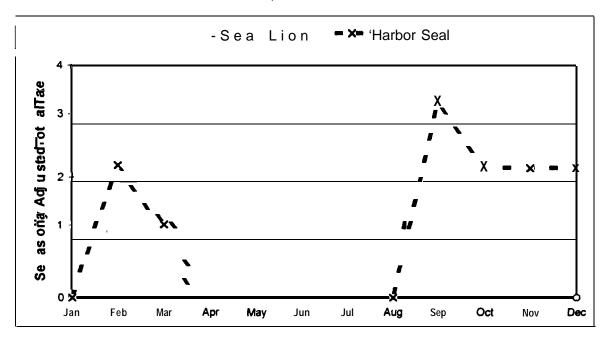
SEA LION	HARVE	ST B	Y MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	Dec M	onth	Total
REPORTED HAR	VEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPAI	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	EXPAND	ED)							
Harvest	0.0	0.0	0 0	00	0 0	00	00	0 0	00	0.0	0 0	0.0	0.0	0.0
Struck & Lost	0.0	0 0	0 0	00	0.0	0.0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0 0	00	0.0	0.0	00	0.0	00	0.0	0.0	0.0	0.0	0 0
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY CO	MUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0 0	0.0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0.0		0.0
Total Take	0.0	'0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0		0.0
Total Take (%)	-	***				***	•••							
Cum Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0		
Cum Take (%)		•••	_	•		•••		***		***				
														_

HARBOR	SEAL F	IARVE	ST BY	MON	ТН							U	Inknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	/lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	ED HOL	JSEHOL	DS (UN	EXPAND	ED)					
Harvest	0	2	1	0	0	0	0	0	3	2	2	2	0	12
Struck 8 Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	2	1	0	0	0	0	0	3	2	2	2	0	12
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (I	EXPAND	DED)							
Harvest	0.0	2.3	11	0.0	0.0	0.0	0.0	0.0	3.4	2.3	2.3	2.3	0.0	135
Struck & Lost	0 0	0 0	0.0	0 0	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	2.3	1.1	0 0	0.0	0 0	0 0	00	3 4	2.3	2.3	2.3	0.0	13.5
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	2.3	1 1	0.0	0.0	0.0	0.0	0.0	3.4	2.3	23	2.3		13.5
Struck & Lost	0.0	0.0	0 0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	2.3	1.1	0.0	0.0	0.0	0 0	0.0	3 4	2.3	2.3	2.3		13.5
Total Take (%)	0.0%	16.7%	8.3%	0.0%	0.0%	0.0%	00%	0.0%	250%	16.7%	16.7%	16.7%		100.0%
Cum. Take	0.0	2.3	3.4	3 4	3.4	3 4	3 4	3 4	6.8	9.0	11.3	13.5		
Cum. Take (%)	0.0%	16.7%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	50.0%	66.7%	83.3%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Pelican, Tlingit and Haida Indians of Pelican Community Council, 1995.

		Sea	Lion		Harbor Seal						
	Reporte	d by	Communi	ty Est.	Repor	led by	Commur	nity Est.			
	Samp	Sample		(Expanded)		nde	(Expanded)				
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0	-	0.0	•••	8	66.7%	9.0	66.7%			
Adult Female	0	***	0.0		3	25.0%	3.4	25.0%			
Adult Unknown Sex	0		0.0	•	0	0.0%	0.0	0.0%			
Juvenile Male	0		0.0		1	0.3%	1.1	0.3%			
Juvenile Female	0		0 0		0	0.0%	0.0	0.0%			
Juvenile Unknown Sex	0	***	00		0	0.0%	0.0	0.0%			
Pup Male	0		00		0	0.0%	0.0	0.0%			
Pup Female	0		0.0	_	0	0.0%	0.0	0.0%			
Pup Unknown Sex	0		0 0		0	0.0%	0.0	0.0%			
Male Unknown Age	0		0 0	_	0	0.0%	0.0	0.0%			
Female Unknown Age	0		00	_	0	0.0%	0.0	0.0%			
Unknown Sex and Age	. 0		0.0		0	0.0%	0.0	0.0%			
Total			0.0	***	12	100.0%	13.5	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION			HARBO	R SEA	<u>\L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	6.3	1.4	9.7
1993	0.0	0.0	0.0	1993	5.3	1.1	6.4
1994	0.0	0.0	0.0	1994	4.4	1.1	5.6
1995	0.0	0.0	0.0	1999	13.5	0.0	13.5

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Pelican, Tlingit and Harda Mans of Pelican Community Council. 1995

Table 12. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Petersburg, 1995

CHAIN REFERRAL **Total Referred Households** 26

Surveyed Households 23 Sampling Fraction 66.5%

Sample Household Members 66 **Estimated Household Members** 76.9

HADVESTAND	110=	INFORMATION

Percentage of Sample Households: Estimated Community Harvest

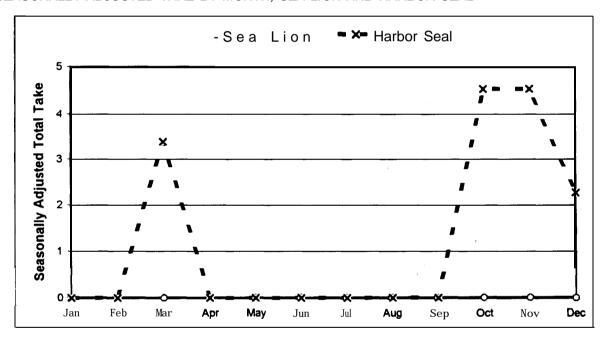
Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
Used 0.0%	65.2%	Total Number Harvested	0.0	13.6
Hunted 0.0%	56.5%	Total Number Struck and Lost	0.0	1.1
Harvested 0.0%	43.5%	Total Number Taken	0.0	14.7
Received 0.0%	261%			
Gave Away 0.0%	30.4%	Number Harvested Per Capit	a NVA	N/A

SEA LION	HARVE	ST B	Y MON	TH								l	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 1	Month	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPLE	ED HOUSE	HOLDS (JNEXPANI	DED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck 8 Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMMU	NITY (E	XPANDE	D)							
Harvest	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0 0	0 0	0.0	0.0	0 0	0.0	0.0
Struck & Lost	0.0	0 0	0.0	0 0	0 0	0 0	00	0 0	00	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	00	0.0	00	0.0	0.0	0.0	0 0	0 0
ESTIMATED	SEASONA	LLY AC	JUSTED	HARVES	T AND	TAKE B	у сом	MUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0 0	0.0	0 0	0 0	00	00	00	00	0.0	0.0		0 0
Struck 8 Lost	0 0	0.0	0.0	0 0	0 0	00	00	00	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Total Take (%)	_	_					***					-		-
Cum Take	0.0	0.0	0.0	0.0	.00	0 0	00	0.0	0 0	0.0	0.0	0.0		
Cum Take (%)	_					***		***	***					
UADB∩D	SEAL L	A DVE	CT DV	MONT	u								Inknown	
HARBOR	SEAL H	ARVE Feb	ST BY Mar	MONT	H May	Jun	Jul	Aug	Sep	Ckt	Nov		Unknown M o n t h	Total
HARBOR REPORTED	Jan	Feb	Mar	Apr	May					Ckt	Nov			Total
	Jan	Feb	Mar	Apr	May					Ckt 4	Nov 3			Total
REPORTED	Jan HARVEST	Feb AND T	Mar AKE BY	Apr SAMPLE	May ED HOUS	SEHOLD	S (UNE	XPANDE	D)		-	Dec	Month	
REPORTED Harvest	Jan HARVEST O	Feb AND T O	Mar AKE BY	Apr SAMPLE 0	May ED HOU: 0	SEHOLD 0	S (UNE 0	XPANDE 0	D) 0	4	3	Dec 2	Month 0	12
REPORTED Harvest Struck & Lost	Jan HARVEST 0 0	Feb AND T O 0 0	Mar AKE BY 3 0 3	Apr SAMPLE 0 0 0	May ED HOUS 0 0 0	SEHOLD 0 0	S (UNE 0 0 0	XPANDE 0 0	D) 0 0	4	3	2 0	0 0	12
REPORTED Harvest Struck & Lost Total Take	Jan HARVEST 0 0	Feb AND T O 0 0	Mar AKE BY 3 0 3	Apr SAMPLE 0 0 0	May ED HOUS 0 0 0	SEHOLD 0 0 0	S (UNE 0 0 0	XPANDE 0 0	D) 0 0	4	3	2 0	0 0	12
REPORTED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 0 0 0 HARVEST	AND TO	Mar TAKE BY 3 0 3 TAKE BY	Apr SAMPLE 0 0 0 COMMU	May D HOUS 0 0 0 UNITY (E	SEHOLD 0 0 0 0 XPANDE	S (UNE 0 0 0 0	XPANDE 0 0 0	D) 0 0 0	4 0 4	3 1 4	2 0 2	0 0 0	12 1 13
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 0 0 0 HARVEST 0.0	Feb AND T 0 0 0 AND 0	Mar AKE BY 3 0 3 TAKE BY 3	Apr SAMPLE 0 0 0 COMMU	May O O O O INITY (E	SEHOLD 0 0 0 XPANDE 00	S (UNE 0 0 0 0 ED)	0 0 0 0 0	D) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 0 4 4.5	3 1 4	2 0 2 2.3	0 0 0	12 1 13
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck 8 Lost	Jan HARVEST 0 0 0 HARVEST 0.0 0.0	Feb	Mar AKE BY 3 0 3 FAKE BY 3.4 0.0 3.4	Apr 0 0 0 0 COMMU 0 0 0 0.0 0.0	May O O O INITY (E O O O O	SEHOLD 0 0 0 XPANDE 0 0 0 0	S (UNE 0 0 0 0 ED) 00 00	XPANDE 0 0 0 0	D) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 0 4 4.5 0.0	3 1 4 3 4 1.1	2 0 2 2.3 0.0	0 0 0 0	12 1 13 13.6 11
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 0 0 0 HARVEST 0.0 0.0	Feb	Mar AKE BY 3 0 3 FAKE BY 3.4 0.0 3.4	Apr 0 0 0 0 COMMU 0 0 0 0.0 0.0	May O O O INITY (E O O O O	SEHOLD 0 0 0 XPANDE 0 0 0 0	S (UNE 0 0 0 0 ED) 00 00	0 0 0 0 0 0.0 0.0 0 0	D) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 0 4 4.5 0.0 4.5	3 1 4 3 4 1.1	2 0 2 2.3 0.0	0 0 0 0	12 1 13 13.6 11
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck 8 Lost Total Take ESTIMATED	Jan HARVEST 0 0 0 HARVEST 0.0 0.0 0.0	Feb AND T 0 0 AND 0 0 0 0 0 0 0 0 0	Mar TAKE BY 3 0 3 TAKE BY 3.4 0.0 3.4 DJUSTED	Apr SAMPLE 0 0 0 COMMU 00 0.0 HARVES	May ED HOU! 0 0 0 INITY (E 0 0 0.0 0.0 ST AND	SEHOLD 0 0 0 XPANDE 00 00 TAKE E	S (UNE 0 0 0 0 ED) 00 00 00	XPANDE 0 0 0 0 0.0 0.0 00 00 IMUNITY	0 0 0 0 0.0 0.0 0.0 (EXPA	4 0 4 4.5 0.0 4.5 NNDED)	3 1 4 3 4 1.1 4.5	2 0 2 2.3 0.0 2.3	0 0 0 0	12 1 13 13.6 1 1 14.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck 8 Lost Total Take ESTIMATED Harvest	Jan HARVEST 0 0 HARVEST 0.0 0.0 0.0 SEASONA	Feb AND T 0 0 AND 0 0 0 CO CO 0 CO CO 0 CO CO 0 CO CO 0 CO 0	Mar AKE BY 3 0 3 TAKE BY 3.4 0.0 3.4 DJUSTED 3.4	Apr SAMPLE 0 0 0 COMMU 00 0.0 HARVES	May ED HOUS 0 0 0 UNITY (E 0.0 0.0 0.0 ST AND 0.0	SEHOLD 0 0 0 XPANDE 00 00 TAKE E	S (UNE 0 0 0 0 0 0 0 0 0 0 0 0 0 0	XPANDE 0 0 0 0 0.0 00 00 imunity 00	0 0 0 0.0 0.0 0.0 (EXPA	4 0 4 4.5 0.0 4.5 ANDED) 4 5	3 1 4 3 4 1.1 4.5 3 4	2 0 2 2.3 0.0 2.3	0 0 0 0	12 1 13 13.6 11 14.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 0 0 HARVEST 0.0 0.0 0.0 SEASONA	Feb AND T 0	Mar AKE BY 3 0 3 TAKE BY 3.4 0.0 3.4 DJUSTED 3.4 0.0	Apr SAMPLE 0	May O O O O INITY (E O O O O O O O O O O O O O	SEHOLD 0 0 0 XPANDE 00 00 TAKE E 00 00	S (UNE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0.0 0.0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0.0 0.0 (EXPA	4 0 4 4.5 0.0 4.5 NDED) 45 0.0	3 4 1.1 4.5 3 4 1.1	2 0 2 2.3 0.0 2.3 2.3 0.0	0 0 0 0	12 1 13 13.6 11 14.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 0 0 HARVEST 0.0 0.0 0.0 SEASONA 0.0 0.0 0.0	Feb AND T 0	Mar AKE BY 3 0 3 FAKE BY 3.4 0.0 3.4 DJUSTED 3.4 0.0 3.4	Apr SAMPLE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	May O O O O O O O O O O O O O	SEHOLD 0 0 0 XPANDE 00 00 TAKE E 00 00	S (UNE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0.0 0.0 0 0 0 0 0 0 0 0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 (EXPA 0.0 0.0	4 0 4 4.5 0.0 4.5 ANDED) 45 0.0 4.5	3 4 1.1 4.5 3 4 1.1 4.5	2 0 2 2 3 0.0 2.3 0.0 2.3	0 0 0 0	12 1 13 13.6 11 14.7

SOURCE Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Petersburg Indian Association, 1995.

		Sea	Lion			Harbo	r Seal	
	Reported	d by	Communi	ty Est	Report	ed by	Commun	ty Est.
	Samp	ole	(Expan	ded)	San	ıde	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	***	0.0		8	66. 7%	9. 0	66. 7%
Adult Female	0	***	00	•••	3	25.0%	3. 4	25.0%
Adult Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%
Juvenile Male	0	_	0.0	_	1	8.3%	1.1	8. 3%
Juvenile Female	0		0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	_	0.0	***	0	0.0%	0.0	0.0%
Pup Male	0		0.0		0	0.0%	0.0	0. 0%
Pup Female	0	-	0.0	***	0	0.0%	0.0	0. 0%
Pup Unknown Sex	0	_	0.0		0	0.0%	0.0	0. 0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0. 0%
Female Unknown Age	0	***	0.0	_	0	0.0%	0.0	0. 0%
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0. 0%
Total	0	•••	0.0		12	100.0%	13.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		!	HARBO	R SEA	<u>.L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	22.4	2.6	25.0
1993	0.0	0.0	0.0	1993	4.5	4. 5	9. 0
1994	0.0	0.0	0.0	1994	15. 2	1.3	16. 4
1995	0.0	0.0	0.0	1995	13. 6	1.1	14. 7

SOURCE, Al aska Department of Fish and Game, Drvisiin of Subsistence, Subsistence Study and Monitor System for **Sea** Liis and Harbor Seals in Alaska, with assistance from **the Petersburg Indian Association, 1995**.

CHAIN REFERRAL Total Referred Households
Surveyed Households
9
Sampling Fraction 81.8%
Sample Household Members 43

Estimated Household Members 52.6

HARVEST AND USE INFORMATION	
HARVEST AND USE INFORMATI	ш

Percentage of Sample Households: Estimated Community Harvest Sea Harbor and Take (Expanded): Sea Harbor <u>Lion</u> Seal <u>Lion</u> Seal used 0.0% 66.7% Total Number Harvested 0.0 15.9 Hunted 0.0% Total Number Struck and Lost 55.6% 0.0 0.0 Total Number Taken Harvested 0.0% 0.0 55.6% 15.9 Received 0.0% 55.6% Gave Away 0.0% 44.4% Number Harvested Per Capita N/A N/A

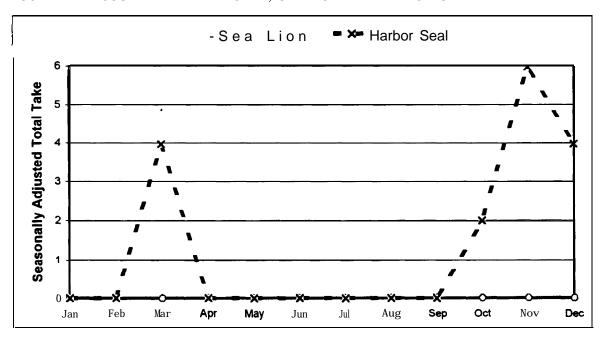
SEA LION F	IARVE	STBY	MON	TH								Ur	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HARV	EST AND	TAKE BY	Y SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED H	ARVEST	AND TA	KE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0.0	0.0	00	0 0	0 0	00	0 0	00	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0 0	0 0	00	00	0 0	0 0	00	0 0	00	00	0.0	0.0
Total Take	0 0	0 0	00	0 0	00	0 0	00	0.0	0.0	00	0.0	00	0.0	0.0
ESTIMATED S	EASONA	LLY AD.	JUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0 0	00	00	00	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	00	0 0	0.0	0 0	0.0	0 0	0.0	0.0		0 0
Total lake	0.0	0.0	0.0	0 0	0 0	0.0	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		***		 -		***			***		-			
Cum Take	0.0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take(%									-					

HARBOR	SEAL H	ARVE	ST BY	MON	ГН			•				Į	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND T	TAKE BY	SAMPI	ED HO	JSEHOL	DS (UN	EXPAND	ED)					
Harvest	0	0	2	0	0	0	0	0	0	1	3	2	5	13
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	0	0	0	0	0	0	1	3	2	5	13
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (EXPAND	DED)							
Harvest	0.0	0.0	2 4	00	0 0	00	0 0	0.0	0 0	1.2	3.7	2.4	61	15.9
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0
Total Take	0.0	0.0	2 4	0 0	0 0	0 0	0 0	0.0	0.0	1.2	3.7	2.4	6.1	15.9
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	ву сс	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	0.0	4.0	00	0 0	00	0 0	0 0	0 0	2.0	6.0	40		15.9
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	4.0	00	0 0	0 0	0 0	0.0	0.0	2.0	6.0	4.0		15.9
Total Take (%)	0.0%	0.0%	250%	0.0%	00%	00%	00%	0.0%	00%	12.5%	37.5%	25.6%		100.0%
Cum. Take	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.0	11.9	15.9		
Cum. Take (%)	0.0%	0.0%	25.0%	25.0%	250%	25.0%	25.0%	25.0%	25.0%	37.5%	750%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alask a, with assistance from the City of Saxman and Saxman IRA Council, 1995.

		Sea	Lion			rSeal			
	Reporte	d by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.	
	Samp	жe	(Expanded	1)	Sam	płe	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		9	69.2%	11.0	69.2%	
Adult Female	0		0.0		3	231%	3. 7	23.1%	
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Juvenile Male	0		0.0		1	7. 7%	1.2	7. 7%	
Juvenile Female	0	•••	0.0	•••	0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Pup Male	0		0.0		0	0. 0%	0.0	0.0%	
Pup Female	0		0.0	_	0	0.0%	0.0	0.0%	
Pup Unknown Sex	0		0.0	•	0	0.0%	0.0	0.0%	
Male Unknown Age	0	_	0.0		, 0	0.0%	0.0	0.0%	
Female Unknown Age	0		0.0		0	0. 0%	0.0	0.0%	
Unknown Sex and Age	0		0.0	•••	0	0. 0%	0.0	0.0%	
Total	0	***	0.0		13	100.0%	15.9	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	<u>L</u>
		Struck	:/ Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	22. 2	1. 2	23.5
1993	0.0	0.0	0.0	1993	5. 6	0.0	5. 6
1994	0.0	0. 0	0.0	1994	16. 5	0.0	16. 5
1995	0.0,	0.0	0.0	1995	15. 9	0.0	15. 9

SOURCE: Al aska **Department** of Fish and Game, **Division** of Subsistence, Subsistence **Study** and Monitor System for Sea Lions and **Harbor** Seals in Alaska, with assistance from the City of **Saxman** and **Saxman** IRA Council, 1995.

SAMPLING DESIGI	V:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	75	525	600	
	Surveyed Households	72	36	108	
	Sampling Fraction	96.0%	6.9%	18.0%	
	Sample Household Members	233	108	341	
Es	timated Household Members	242.7	1575.0	1017.7	

HARVEST AND USE INFORMATION

Percentage of Native Househo	olds:	Estimated Community Harvest		
Sea H	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
used 0.0%	847%	Total Number Harvested	0.0	93.0
Hunted 0.0%	22.9%	Total Number Struck and Lost	0.0	6.3
Harvested 0.0%	6.3%	Total Number Taken	0.0	100.0
Received 0.0%	821%			
Gave Away 0.0%	12.0%	Number Harvested Per Capita	0.00	0.05

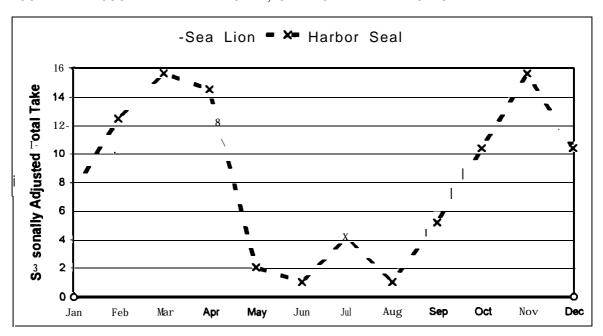
SEA LION	V HARVE	ST B	Y MON	TH								Ur	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Ckt	Nov	Dec M	onth	Total
REPORTED HA	ARVEST AND	TAKE E	BY SAMPLI	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND 1	AKE BY	COMM	UNITY ((EXPANI	DED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	JUSTED	HARVE	ST ANI	D TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0 0	0.0	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		•••		•••							•			
Cum Take	0.0	0.0	0 0	0 0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0		
Cum	Take/%∖			_							_			

HARBOR	SEAL H	ARVE	ST BY	MON	TH							U	Inknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Ckt	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	LED HOU	SEHOL	DS (UN	EXPAND	ED)					
Harvest	7	12	14	12	2	1	4	1	5	9	13	10	0	90
Struck & Lost	0	0	1	2	0	0	0	0	0	1	2	0	0	6
Total Take	7	12	15	14	2	1	4	1	5	10	15	10	0	96
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (E	XPAND	ED)							
Harvest	1.3	12.5	14.6	12.5	2.1	1.0	42	1.0	5.2	9 4	13.5	10.4	0.0	93.8
Struck & Lost	0.0	0.0	1.0	2.1	0.0	0.0	0 0	0.0	0.0	1.0	2.1	0 0	0.0	6.3
Total Take	7.3	12.5	15.6	14.6	21	1.0	4.2	10	5.2	10.4	15.6	104	0.0	loo.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AND	TAKE	ву со	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	7.3	12.5	14.6	12.5	2.1	1.0	4.2	1.0	5.2	9 4	13.5	10.4		93.8
Struck & Lost	0.0	0.0	1.0	2.1	0.0	0.0	00	0.0	0.0	1.0	2.1	0.0		6.3
Total Take	7.3	12.5	15.6	14.6	2.1	1.0	4.2	1.0	5.2	10.4	15.6	10.4		100.0
Total Take (%)	7.3%	12.5%	15.6%	14.6%	2.1%	1.0%	4.2%	1.0%	52%	10.4%	15.6%	10.4%		100.0%
Cum. Take	7.3	19.8	35.4	50.0	52.1	53.1	57.3	58.3	63.5	74.0	896	100.0		
Cum Take (%)	7.3%	19.8%	35.4%	50.0%	52.1%	531%	57.3%	59.3%	63.5%	74.0%	896%	100.0%		

SOURCE Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaski wilh assistance from the ANB and Sitka Tribal Association, 1995

		Sea	Lion			Harbo	orSeal	
	Reporte	d by	Communi	ty Est.	Report	ed by	Commun	ity Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	•••	0.0		34	31.6%	35.4	37.6%
Adult Female	0	***	0.0	****	16	17.6%	16.7	17.6%
Adult Unknown Sex	0		0.0	***	4	44%	4.2	4.4%
Juvenile Male	0		0.0		24	26.7%	25.0	26.7%
Juvenile Female	0	***	00	•	4	4.4%	4.2	4.4%
Juvenile Unknown Sex	0		0.0	***	2	2.2%	2.1	2.2%
Pup Male	0	***	0.0		0	0.0%	0.0	0.0%
Pup Female	0	***	0.0	***	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		6	6.7%	6.3	6.7%
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	•••	0.0	•	0	0.0%	0.0	0.0%
Total	0		0.0	•••	90	100.0%	93.6	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

_		SEA	LION			Н	ARBOR	R SEA	L
			Struck/	Total				Struck/	Total
	<u>Year</u>	<u>Harvest</u>	Lost	Take		<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
	1992	3.6	1.3	5.0		1992	124. 7	21.4	146. 1
	1993	0.0	1. 1	1. 1	•	1993	109.3	20.6	129.9
	1994	1. 1	1.1	2.2		1994	110. 5	20. 1	130. 6
	1995	0.0	0.0	0.0		1996	93.8	6.3	100.0

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals In Alaska, with assistance from the ANB and Sitka Tribal Associatii, 1995

Table 15. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Wrangell, 1995

SAMPLING DESIGN: CHAIN REFERRAL

Total Referred Households
Surveyed Households
Sampling Fraction
Sample Household Members
Estimated Household Members
17.5

HARVEST AND USE INFORMATION

SEA LION HARVEST BY MONTH

Percentage of Sample Households: Estimated Community Harvest and Take (Expanded): Sea Harbor Sea Harbor Lion Seal Lion Seal used 0.0% **Total Number Harvested** 0.0 75.0% 69.3 Hunted 0.0% 100.0% **Total Number Struck and Lost** 0.0 22.8 Han&ed 0.0% 75.0% Total Number Taken 112.0 Received 0.0% 0.0% Gave Away 00% 25.0% Number Harvested Per Capita NA N/A

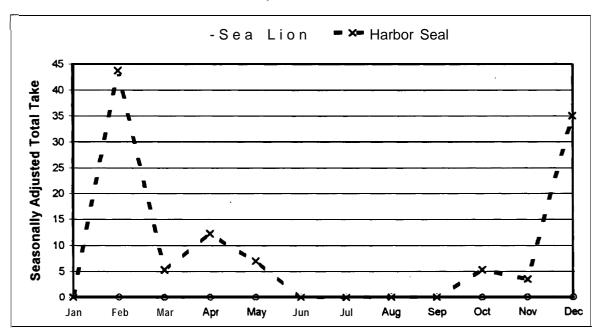
Unknown

	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE I	BY SAMPL	.ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND 1	TAKE BY	' COMM	IUNITY ((EXPAND)ED)	• •	•					
Harvest	0 0	0.0	0.0	0 0	00	0 0	0 0	0.0	0.0	0 0	0:0	0.0	00	0.0
Struck & Lost	0.0	0.0	0.0	0.0	00	00	00	0 0	0.0	00	0.0	0 0	0.0	0 0
Total Take	0.0	0.0	0.0	0 0	00	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0 0	0.0
ESTIMATED	SEASONA	LLY AL	DJUSTED	HARVE	EST AND) TAKE	ву со	OMMUNITY	Y (EXP	ANDED)				
Harvest	0.0	0.0	0.0	0 0	00	00	00	0 0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0 0	00	00	00	0 0	0 0	00	0 0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	00	0 0	0 0	0.0	0.0	0.0	00	0.0		0.0
Total Take(%)		•••	_		-				***	•=•				
Cum Take	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0		
Cum. Tal	ke (%)						•	<u></u>						
HARBOR	SEAL H	IARVE	ST RV	MON	TH								Unknown	
, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	Jan	Feb	Mar	Abr	Mav	Jun	Jul	Aua	Sep	Oct	Nov		Month	Total
REPORTED	HARVEST	AND	TAKE BY	' SAMP	LED HO	USEHOL	DS (UN	NEXPAND	ED)					
Harvest	0	19	1	7	4	0	0	0	0	2	1	17	0	51 .
Struck 8 Lost	0	6	2	0	0	0	0	0	0	1	1	3	0	13
Total Take	0	25	3	7	4	0	0	0	0	3	2	20	0	64
ESTIMATED	HARVEST	AND	TAKE BY	Y COMM	MUNITY	(EXPAND	DED)							
Harvest	0.0	33.3	1.8	12.3	7.0	00	0.0	0.0	0.0	3.5	1.8	29.6	0.0	89.3
Struck & Lost	0.0	105	3.5	0 0	0 0	00	0 0	0 0	0.0	1.6	18	5.3	0.0	226
Total Take	0 0	43.6	5.3	12.3	70	0 0	00	0.0	0.0	5.3	3.5	35.0	0.0	112.0)
ESTIMATED	SEASONA	ALLY A	DJUSTED) HARV	EST AN	D TAKE	ву сс	OMMUNIT	Ү (ЕХР	ANDED)				
Harvest	0.0	33.3	1.8	12.3	70	0 0	0 0	0.0	0.0	3 5	1.8	29.8		a93
Struck & Lost	0.0	10.5	3.5	0 0	0 0	0.0	0 0	0.0	0.0	18	1.0	5.3		22.6
Total Take	0.0	43.8	5.3	123	70	0 0	00	0.0	0 0	5.3	3.5	350		112.0
Total Take (%)	0.0%	39.1%	47%	109%	63%	0.0%	00%	00%	0.0%	4.7%	3.1%	31.3%		100.0%
Cum. Take	0.0	438	49.0	61.3	68.3	68.3	68.3	663	683	73.5	770	112.0		
Cum. Take (%)	0.0%	39.1%	43.8%	54.7%	60.9%	60.9%	60.9%	60.9%	60.9%	65.6%	68.8%	100.0%		
SOURCE: Alas	ka Denartme	nt of Fict	and Cama	Discion	Las Cubbia	Janes Col	l	Charles and	M '4 C	6.	A 1			Aleston

SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsatence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Wrangell Cooperative Association, 1995.

		Sea	Lion			Harbo	r Seal	
	Reporte	d by	Communi	ty Est.	Report	ed by	Commun	nity Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Expai	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	•••	0.0		20	39.2%	35.0	39.2%
Adult Female	0	•••	0.0		18	35.3%	31.5	35.3%
Adult Unknown Sex	0	***	0.0		4	7.8%	7.0	7.8%
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%
Juvenile Female	0		0.0	_	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		4	7.8%	7.0	7.6%
Pup Male	0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		5	9.8%	8.8	9.8%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		00		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%
Total	0		0.0		51	100.0%	89.3	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1993	2 6.0	8.0	14.0
1993	0.0	0.0	0.0	199	3 19.5	9.0	28.5
1994	0.0	0.0	0.0	199	4 101.0	27.0	128.0
1995	0.0	0.0	0.0	199	5 89.3	22.8	112.0

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Wrangell Cooperative Association, 1995

CHAIN REFERRAL Total Referred Households
Surveyed Households
47
Sampling Fraction
05.5%
Sample Household Members
154
Estimated Household Members
180.2

HARVEST AND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea Harbor Sea Harbor and Take (Expanded): Lion Seal Lion Seal Used 0.0% 1090% **Total Number Harvestad** 615.5 0.0 Hunted 0.0% Total Number Struck and Lost 70.2% 0.0 79.6 Harvested 0.0% 66.0% Total Number Taken 0.0 695.1 Received 0.0% 100.0% Gave Away 0.0% 91.5% Number Harvested Per Capita N/A WA

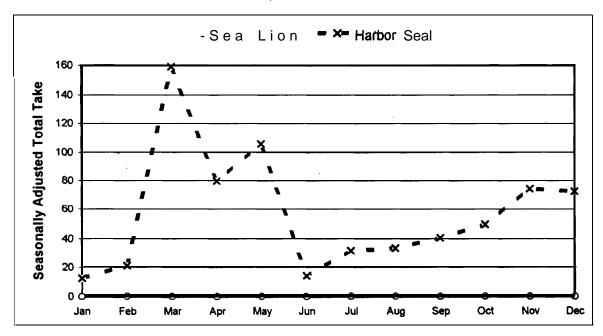
SEA LION HARVEST BY MONTH Unknown Oct Nov Dec Month May Sep Total Jul Aug Jan Feb Mar Apr Jun REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED) Harvest 0 0 0 0 Ð n 0 0 0 0 0 0 0 Struck & Lost 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Total Take 0 0 0 0 0 0 0 0 0 0 0 0 0 ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest 0.0 0.0 0.0 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 00 0.0 0.0 Struck & Lost 0.0 0.0 0.0 0.0 00 0.0 0.0 0.0 0.0 0.0 0.0 00 0.0 0.0 Total Take 0.0 00 00 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest 0.0 0.0 0.0 00 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Struck & Lost 0.0 0.0 0.0 00 00 0 0 0.0 0.0 0 0 0.0 0.0 0.0 0.0 Total Take 0.0 0.0 0.0 0.0 0.0 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 TotalTake Cum Take 0.0 0.0 0.0 00 00 00 00 0.0 0.0 0.0 0.0 0.0 Cum Take (%)

HARBOR	SEAL H	ARVI	EST BY	MON	TH							U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	/lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HC	USEHOL	DS (UN	IEXPAND	ED)					
Harvest	7	12	56	41	59	8	17	17	23	27	41	40	178	526
Struck & Lost	0	0	34	4	1	0	1	2	0	1	1	1	23	68
Total Take	7	12	90	45	60	8	18	19	23	28	42	41	201	594
ESTIMATED	HARVEST	AND	TAKE BY	COMN	IUNITY	(EXPAND	DED)							
Harvest	8.2	14.0	65.5	480	690	9 4	199	19.9	269	31.6	48.0	46.8	2063	615.5
Struck & Lost	0 0	0.0	398	47	1.2	0 0	12	2.3	0.0	1.2	1.2	1.2	269	79.6
Total Take	8.2	14.0	105.3	52 7	702	9 4	21 1	22.2	269	32.8	49 1	48.0	235.2	695.1
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AN	D TAKE	ву сс	тіипими	Y (EXP	ANDED)				
Harvest	12.4	21.2	99.1	72 5	1044	142	30.1	301	40.7	47.8	72.5	70.8		615.5
Struck & Lost	0.0	0.0	60.1	7.1	1.8	0.0	1.8	3.5	0.0	1.8	1.8	1.8		79.6
Total Take	12.4	21.2	159.2	796	1061	14.2	31 8	33.6	40.7	495	74.3	72.5		695.1
Total Take (%)	1.8%	3.1%	22.9%	11.5%	153%	2.9%	4.6%	4.8%	5.9%	7.1%	10.7%	10.4%		100.0%
Cum. Take	12.4	33.6	192.8	2724	378.5	392.6	424.5	456.1	498.8	548.3	622.6	695.1		
Cum. Take (%)		4.0%		39.2%	54.5%	56.5%	61.1%	65.9%	71.8%	78.9%	89.6%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaski with assistance from the Yakutat ANB/ANS, Yakutat Native Association, and Yak-Tat Kwaan, Inc., 1995.

THINK VEGT BY NGE TIND	JLX							
		Sea	Lion			Harbo	rSeal	
	Reporte	d by	Communit	y Est	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expand	ied)	Sam	ple	(Expar	ıded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	***	168	31.9%	196.6	31.9%
Adult Female	0	_	0.0		194	36.9%	227.0	36.9%
Adult Unknown Sex	0	_	0.0		164	31.2%	191.9	31.2%
Juvenile Male	0		0.0	•••	0	0.0%	0.0	0.0%
Juvenile Female	0		0.0	•••	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	***	0.0		0	0.0%	0.0	0.0%
Pup Male	0		0.0		0	0.0%	0.0	0.0%
Pup Female	0	***	0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	_	0.0		0	0.0%	0.0	0.0%
Total	0		0.0		526	100.0%	615.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBC	RSEA	<u>.L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	246.0	61.3	309.3
1993	0.0	0.0	0.0	1993	666.4	67.4	626.6
1994	0.0	0.0	0.0	1994	417.1	35.0	462.1
1995	0.0	0.0	0.0	1996	615.5	79.6	695.1

SOURCE. Alaska Department of Fish and Game, Division of Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Yakutat ANB/ANS, Yakutat Native Association, and Yak-Tat Kwaan, Inc., 1995

CENSUS

Total Native Households

Surveyed Households

Sampling Fraction

Sample Household Members

Estimated Household Members

83.8

HARVESTAND USE INFORMATION

Percentage of Native Households:	Estimated Community Harvest		
Sea Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u> <u>Seal</u>		Lion	Seal
Used 50.0% 57.1%	Total Number Harvested	6.6	444
Hunted 35.7% 429%	Total Number Struck and Lost	0.0	1.6
Harvested 14.3% 42.9%	Total Number Taken	6.6	46.0
Received 42.9% 57.1%			
Gave Away 14.3% 42.9%	Number Harvested Per Capita	0.08	0.53

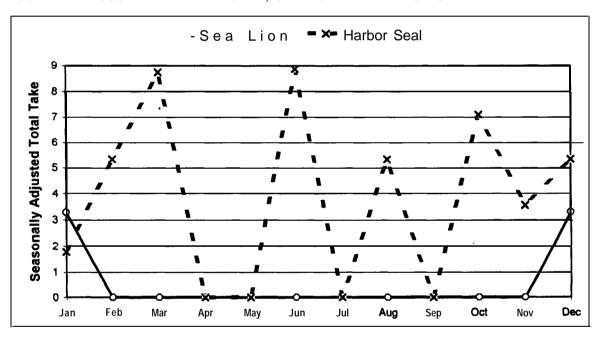
SEA LION									_		••		nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Ckt	Nov	Dec N	<i>l</i> lonth	Total
REPORTED HAI	RVEST AND	TAKE	BY SAMPL	ED HOU	SEHOLDS	(UNEXPA	ANDED)							
Harvest	2	0	0	0	0	0	0	0	0	0	0	2	0	4
Struck & Lost	0	0	0	0	0	0	0	ó	0	0	0	0	0	, 0
Total Take	2	0	0	0	0	0	0	0	0	0	0	2	0	4
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (EXPANI	DED)							
Harvest	3.3	0.0	0.0	0 0	0 0	00	00′	0 0	0 0	0 0	0.0	3 3	0 0	6.6
Struck & Lost	0 0	0.0	0 0	0 0	0 0	00	0 0	00	00	00	0 0	0.0	0.0	0 0
Total Take	3.3	0.0	0.0	0.0	0 0	00	0 0	00	0.0	0 0	0.0	3.3	0.0	6.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	ву со	OMMUNIT	ГҮ (ЕХР	ANDED)				
Harvest	3.3	0.0	0.0	0 0	0 0	00	0 0	0 0	00	0.0	0 0	3.3		6.6
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	3.3	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	3.3		6.6
Total Take (%)	50.0% 0	0 %	0.0%	00%	00%	00%	00%	00%	0.0%	00%	0.0%	50.0%		100.0%
Cum Take	3.3	3.3	3.3	3 3	3 3	33	33	33	33	3.3	3 3	6.6		
Cum, Take (%)	50.0%	50.0%	50.0%	500%	50.0%	500%	500%	50 0%	500%	50.0%	50.0%	100.0%		
H∆RR∩R													Inknown	

HARBOR	SEAL H	IARVE	EST BY	MΟN	ΙΤΗ							U	Inknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec N	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMF	LED HO	USEHOL	LDS (UI	NEXPAND)ED)				_	·
Harvest	1	3	4 ′	0	0	5	0	3	0	4	2	3	2	27
Struck & Lost	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Take	1	3	5	0	0	5	0	3	0	4	2	3	2	28
ESTIMATED	HARVEST	AND	TAKE BY	СОМ	MUNITY	(EXPAN	DED)							
Harvest	1.6	4.9	6.6	0 0	0 0	82	0 0	49	0.0	66	3.3	4.9	3.3	444
Struck & Lost	0.0	0.0	1.6	0.0	0 0	00	00	0 0	0 0	0.0	0.0	0 0	0.0	1.6
Total Take	1.6	4.9	8.2	0 0	0.0	82	00	49	0 0	6.6	3.3	4.9	3.3	46.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	/EST AN	D TAKE	BY C	OMMUNIT	ry (EXP	ANDED)				
Harvest	1.8	53	7.1	0 0	0 0	8 9	0 0	5 3	0 0	71	3.5	5 3		444
Struck & Lost	0.0	0.0	16	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0		1.6
Total Take	1.8	5 3	8.7	0 0	0.0	8 9	00	5 3	0.0	71	3.5	53		46.0
Total Take (%)	3.9%	11.6%	19.0%.	00%	0.0%	193%	0.0%	11.6%	0.0%	15.4%	7.7%	116%		100.0%
Cum. Take	1.6	7.1	15.8	15.8	15.8	24.7	247	300	30.0	37.1	40.7	46.0		
Cum. Take (%)		15.4%		34.4%		53.7%	537%	653%	65.3%		68.4%	100.0%	1	1

SOURCE, Alaska Department of Fish and Game, Division of Subsistence Subsistence Study and Monitor System for Sea Lwns and Harbor Seals in Alaska, with assistance from the Chenega Bay IRA Council, 1995

		Sea	Lion			Harbo	rSeal	
	Reporte	ed by	Commun	ity Est.	Report	ed by	Community Est	
	Samp	ple	(Expar	ided)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	2	50.0%	3.3	50.0%	10	37.0%	16.4	37.0%
Adult Female	1	25.0%	1.6	25.0%	2	7.4%	3.3	7.4%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	7	25.9%	11.5	25.9%
Juvenile Female	1	25.0%	1.6	25.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	00%	6	22.2%	9.9	22.2%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	2	7.4%	3.3	7.4%
Total	4	100.0%	6.6	100.0%	27	100.0%	44.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION		H	HARBOI	R SEA	۱L
		Struck/	Total			Struck/	Total
Year	Harvest	Lost	Take	<u>Year</u>	Harvest	Lost	<u>Take</u>
1992	6.9	1.2	8.1	1992	42.6	2.3	44.9
1993	11.1	6.6	17.7	1993	60.8	2.2	63.0
1994	6.6	0.0	6.6	1994	42.0	3.9	45.9
1995	6.6	0.0	6.6	1995	44.4	1.6	46.0

SOURCE. Alaska Department of Fish and Game, Diiisii of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chenega Bay IRA Council, 1995.

SAMPLING DES	IGN:	<u>Active</u>	<u>Other</u>	<u>Total</u>
TWO-STRATA	Total Native Households	14	218	232
	Surveyed Households	14	24	36
	Sampling Fraction	100.0%	11.0%	16.4%
	Sample Household Members	37	66	103
	Estimated Household Members	37.0	599.5	636.5
HARVEST AND	USE INFORMATION			
Percentage of Na	ative Households:	Estimated Com	•	

Percentage of Native Households:	Estimated Community H
Soa Harbor	and Take (Expanded):

	Sea	Harbor	and Take (Expanded):	Sea	Harbor
	Lion	<u>Seal</u>		Lion	<u>Seal</u>
Used	0.0%	30.9%	Total Number Harvested	0.0	83.4
Hunted	0.4%	9.6%	Total Number Struck and Lost	1.0	2.0
Harvested	0.0%	9.6%	Total Number Taken	1.0	65.4
Received	0.0%	22.2%			
Gave Away	0.0%	10.0%	Number Harvested Per Capita	0.00	0.13

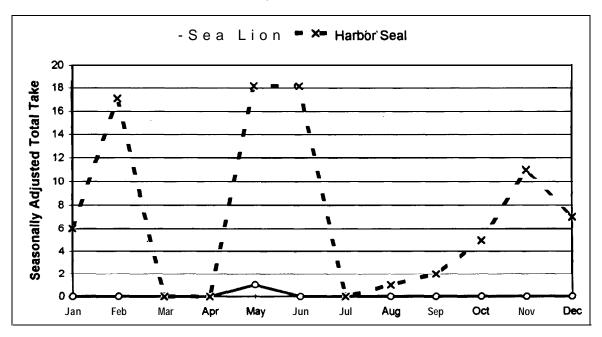
SEA LION	I HARVE	EST B	BY MON	TH								U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	lonth	Total
REPORTED HA	ARVEST ANI	D TAKE	BY SAMPL	ED HOL	JSEHOLDS ((UNEXPA	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total Take	0	0	0	0	1	0	0	0	0	0	0	0	0	1
ESTIMATED	HARVEST	AND	TAKE BY	COM	MUNITY (E	XPANI	DED)							
Harvest	0.0	0.0	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	1.0	0 0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	1.0
Total Take	0.0	0.0	0.0	0.0	1.0	00	0.0	0 0	0 0	0.0	0.0	0.0	0.0	1.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	ву со	TINUMM	Y (EXPA	NDED)				
Harvest	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	1.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0		1.0
Total Take	0 0	0.0	0.0	0.0	1.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		1.0
Total Take (%)	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	00%	0.0%	0.0%	0.0%	00%	0.0%		100.0%
Cum Take	0 0	0.0	0.0	0.0	1.0	1.0	10	10	10	10	1.0	1.0		
Cum Take (%)	0.0%	0.0%	0.0%	0.0	% 100	. 0 %	100.0% 1	100.0% 100	0.0% 100.	0% 100.09	% 100.0%	100.0%		

HARBOR	SEAL H	IARVE	ST BY	MON	TH							Į	Unknown	
_	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPL	ED HOL	JSEHOLI	os (UN	EXPAND	ED)					
Harvest	6	7	0	0	2	2	0	1	2	5	11	7	0	43
Struck&Lost	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total Take	6	9	0	0	2	2	0	1	2	5	11	7	0	45
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY	(EXPANI	DED)							
Harvest	6.0	15.1	0.0	0.0	18.2	18.2	0 0	10	2.0	5.0	110	70	0 0	834
Struck & Lost	0 0	20	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	20
Total Take	6.0	17 1	0.0	0.0	18.2	18.2	0 0	10	2.0	5.0	11.0	7.0	0.0	85.4
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AN	D TAKE	ву сс	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	6.0	15.1	0.0	0.0	18.2	182	0 0	1.0	2.0	5.0	11.0	7.0		634
Struck & Lost	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		2.0
Total Take	6.0	171	0.0	0.0	18.2	182	00	1.0	2.0	5.0	11.0	7.0		85.4
Total Take (%)	7.0%	20.0%	0.0%	0.0%	21.3%	21.3%	0.0%	1.2%	2.3%	5.9%	12.9%	8.2%		100.0%
Cum. Take	6.0	23.1	23.1	231	41.3	59.4	59.4	60.4	624	67 4	70 4	65.4		
Cum. Take (%)	7.0%	27.0%	27.0%	27.0%	48.3%	69.6%	69.6%	70.7%	73.1%	78.9%	91.8%	100.0%		_

SOURCE. Alaska Department of Frsh and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals m Alask a, with assistance from the $\ensuremath{\text{Traditional}}$ Villageof Eyak, 1995

		Sea	Lion					
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	•••	0.0		18	41.9%	34.2	41.0%
Adult Female	0	***	0.0	_	12	27.9%	28.2	33.8%
Adult Unknown Sex	0		0.0	***	1	2.3%	9.1	10.9%
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%
Juvenile Female	0		0.0	***	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		5	11.6%	5.0	6.0%
Pup Male	0		0.0	-	0	0.0%	0.0	0.0%
Pup Female	0	•	0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0	***	0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0	***	0.0	-	0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	_	0.0		7	16.3%	7.0	8.4%
Total	0		00		a	100.0%	83.4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBOI	R SEA	<u>\L</u>
<u> </u>		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	103.6	6.8	112.5
1993	1.5	0.0	1.5	1993	147.4	5.5	152.9
1994	0.0	0.0	0.0	1994	135.6	9.1	144.9
1995	0.0	1.0	1.0	1995	03.4	2.0	85.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Traditional Village of Eyak, 1995

Table 19. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Nanwalek, 1995

CENSUS Total Native Households 40
Surveyed Households 39
Sampling Fraction 97.5%

Sample Household Members 157
Estimated Household Members 161.0

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

Sea I	Harbor	and Take (Expanded):	Sea	Harbor
L <u>ion</u>	<u>Seal</u>		<u>Lion</u>	<u>Seal</u>
used 59.0%	92.3%	Total Number Harvested	9.2	23.6
Hunted 20.5%	33.3%	Total Number Struck and Lost	0.0	0.0
Harvested 12.8%	25.6%	Total Number Taken	9.2	23.6
Received 53.8%	07.2%			
Gave Away 25.6%	25.6%	Number Harvested Per Capita	0.06	0.15

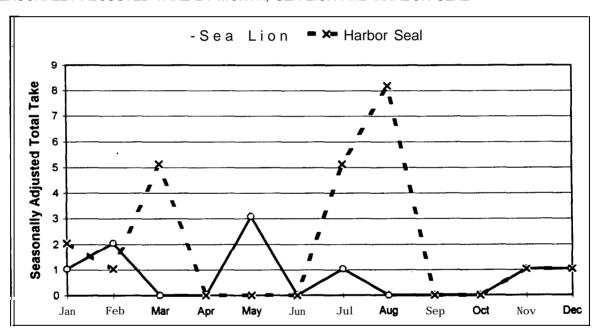
SEA LION	I HARVI	EST B	Y MON	ТН									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dac	Month	Total
REPORTED HA	RVEST ANI	D TAKE I	BY SAMPL	ED HOU	SEHOLDS	(UNEXP	ANDED)							
Harvest	1	2	0	0	3	0	1	0	0	0	1	1	0	9
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	2	0	0	3	0	1	0	0	0	1	1	0	9
ESTIMATED	HARVEST	Γ AND 1	TAKE BY	COMM	UNITY (EXPAN	DED)							
Harvest	1.0	21	0.0	0 0	31	00	10	00	00	00	10	10	0 0	9.2
Struck & Lost	0.0	0 0	0.0	0 0	00	00	00	00	00	00	00	0.0	0.0	00
Total Take	1.0	21	0.0	00	31	00	10	00	00	00	10	10	0.0	9.2
ESTIMATED	SEASONA	ALLY AI	JUSTED	HARV	EST AND	TAKE	ВУ СС	MMUNIT	ГҮ (ЕХР	ANDED)				
Harvest	1.0	2.1	0.0	0.0	31	00	10	0.0	00	00	1.0	1.0		9.2
Struck & Lost	0 0	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0		0.0
Total Take	1.0	2.1	0.0	0 0	3.1	0.0	10	00	0.0	0.0	1.0	1.0		9.2
Total Take (%)	11.1%	22.2%	0.0%	0.0%	33.3%	0.0%	11 1%	0.0%	0.0%	0.0%	11.1%	11.1%		100.0%
Cum Take	1.0	3.1	31	31	6.2	6.2	72	7.2	72	7.2	a.2	9.2		
Cum Take (%)	11.1%	33.3%	33.3%	333%	667%	667%	770%	770%	770%	770%	88.9%	100.0%		

HARBOR	SEAL H	ARVE	STBY	MON	ТН							Ţ	Jnknown	
-	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	ED HOUS	SEHOL	DS (UN	EXPAND	ED)					
Harvest	2	1	5	0	0	0	5	8	0	0	1	1	0	23
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	2	1	5	0	0	0	5	8	0	0	1	1	0	23
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPANI	DED)							
Harvest	2.1	1.0	5.1	0.0	0.0	0.0	5.1	8.2	0.0	0.0	1.0	1.0	0.0	23.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	00	00	00	0.0	00	0 0	0 0	0.0
Total Take	2.1	1.0	5.1	0.0	00	00	51	82	00	00	1.0	10	0 0	23.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	EST AND	TAKE	ву со	MMUNIT	Y (EXP	ANDED)				
Harvest	2.1	10	51	0 0	00	00	51	82	00	00	10	1.0		23.6
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	00	00	0.0	0.0	0.0	0.0		0.0
Total Take	2.1	1.0	5.1	0.0	0.0	00	51	82	00	0.0	1.0	1.0		23.6
Total Take (%)	8.7%	4.3%	21.7%	0.0%	0.0%	0.0%	21.7%	34.8%	0.0%	0.0%	4.3%	4.3%		100.0%
Cum. Take	2.1	3.1	8.2	8.2	8.2	8.2	13.3	21.5	21.5	21.5	22.6	23.6		
Cum. Take (%)	8.7%	13.0%	34.8%	34.8%	34.8%	34.8%	5 6.5%	91.3%	91.3%	91.3%	95.7%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nanwalek Traditional Council and English Bay Corporation, 1995

		Sea	Lion		Harbor Seal						
	Reporte	•	Commun	•	Reporte	•	Commun	•			
	Sam	ple	(Expan	ded)	Sam	p le	(Expanded)				
	Number	%	Number	%	Number	%	Number	%			
Adult Male	5	55.6%	5.1	55.6%	5	21.7%	5.1	21.7%			
Adult Female	1	11.1%	1.0	11.1%	2	6. 7%	2. 1	8. 7%			
Adult Unknown Sex	1	11.1%	1.0	11.1%	5	21. 7%	5.1	21.7%			
Juvenile Male	1	11.1%	1.0	11.1%	4	17. 4%	4 1	17.4%			
Juvenile Female	0	0.0%	0.0	0.0%	0	00%	0.0	0.0%			
Juvenile Unknown Sex	1	11 1%	1.0	11 1%	6	26.1%	6. 2	26.1%			
Pup Male	0	0.0%	0.0	0.0%	1	4. 3%	1.0	4. 3%			
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0. 0%			
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0. 0%			
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Total	9	100.0%	9.2	100.0%	23	100.0%	23. 6	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	۱L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	<u>Take</u>
1992	6. 3	0.0	6. 3	1992	27.9	0.0	27. 9
1993	8. 5	1. 1	9. 5	1993	33.9	3. 2	37. 1
1994	1. 2	2. 3	3. 5	199-	4 29.0	4. 6	33. 7
1995	9. 2	0.0	9. 2	199	5 23.6	0.0	23.6

SOURCE. **Alaska** Department of Fish and Game, Division of **Subsistence**, **Subsistence** Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the **Nanwalek Traditional** Council and English **Bay Corporation**, 1995.

CENSUS

Total Native Households

Surveyed Households

Sampling Fraction

58

Sample Household Members 160.08
Estimated Household Members 160.0

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

and Take (Expanded): Sea Harbor Sea Harbor <u>Lion</u> Seal <u>Seal</u> <u>Lion</u> Used 60.3% 87.9% Total Number Harvested 10.0 23.0 Hunted 12. 1% 22. 4% Total Number Struck and Lost 2.0 0.0 Harvested 10.3% 8.6% Total Number Taken 12.0 23.0 Received 55.2% 845% Gave Away 13.8% Number Harvested Per Capita 0.06 138% 0.14

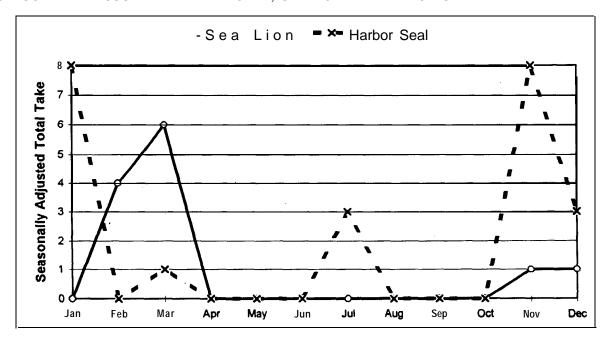
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Ckt	Nov	Dec	Month	Total
REPORTED HA	ARVEST ANI	D TAKE E	BY SAMPL	ED HOUS	EHOLDS	(UNEXP	ANDED)							
Harvest	0	4	4	0	0	0	0	0	0	0	1	1	0	10
Struck & Lost	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Take	0	4	6	0	0	0	0	0	0	0	1	1	0	12
ESTIMATED	HARVEST	AND 1	TAKE B Y	COMMI	JNITY ((EXPAN	DED)	•						
Harvest	0.0	4.0	40	0 0	00	0 0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	10.0
Struck & Lost	0.0	0 0	20	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2. 0
Total Take	0.0	40	60	0 0	00	0 0	0 0	0.0	0.0	0.0	1.0	1.0	0.0	12. 0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST ANI) TAKE	BY CO	OMMUNI	TY (EXP	ANDED)				
Harvest	0.0	4. 0	'4.0	0 0	00	0 0	0.0	0.0	0.0	0.0	1.0	1.0		10.0
Struck & Lost	0.0	0.0	2. 0	0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0 0		2. 0
Total Take	0.0	4.0	60	0 0	00	0 0	0.0	0.0	0.0	0.0	1.0	1.0		12.0
Total Take (%)	0.0%	33. 3%	50.09	% 00%	00%	00%	0.0%	0.0%	0.0%	0.0%	8. 3%	8. 3%		100.0%
Cum Take	0.0	4. 0	10.0	100	100	100	10.0	10.0	10.0	10.0	11.0	12. 0		
Cum Take (%)	0.0%	33.3%	83.3%	833%	833%	833%	833%	83.3%	83. 3%	833%	91.7%	100.0%		
	CEAL I		CT DV	140017	-, ,								Halmoura	

HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec N	lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	ED HOU	SEHOL	DS (UN	EXPAND	ED)					
Harvest	8	0	1	0	0	0	3	0	0	0	8	3	0	23
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	8	0	1	0	0	0	3	0	0	0	8	3	0	23
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPAN	DED)							
Harvest	8. 0	0.0	10	0 0	0 0	00	3 0	0.0	0.0	0.0	8.0	3.0	0.0	23.0
Struck & Lost	00	0.0	0 0	0 0	0 0	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	8. 0	0.0	1.0	0 0	0 0	0 0	30	0.0	0.0	0.0	8.0	3.0	0.0	23.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AND	TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	8. 0	0 0	1.0	0 0	0 0	0 0	30	0.0	0.0	0.0	8.0	3.0		23.0
Struck & Lost	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	8. 0	0.0	1.0	00	0 0	0 0	3 0	0.0	0.0	0.0	8.0	3.0		23.0
Total Take (%)	34. 6%	0.0%	4. 3%	0.0%	00%	00%	130%	0.0%	0.0%	0.0%	34.6%	13.0%		100.0%
Cum. Take	8. 0	8. 0	9.0	90	90	90	12.0	12.0	12.0	12.0	20.0	23.0		
Cum. Take (%)	<u>'</u>	34.8%	39.1%	39.1%	39.1%	39.1%	52.2%	52.2%	52.2%	52.2%	87.0%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Graham Village Council and Port Graham Corporation, 1995

			S	ea Lion			Harbor Seal							
	-	Reporte	ed by		Commun	ity Esl.	Reporte	ed by	Commun	ity Est				
		Samp	ole	(E	xpanded)	Samp	ole	(Expai	nded)				
	_	Number	%	N	lumber	%	Number	%	Number	%				
Adult Male	_	1	10.0%		1.0	10.0%	9	39.1%	9.0	39.1%				
Adult Female		0	0.0%		0.0	00%	2	8.7%	2.0	0.7%				
Adult Unknown Sex		2	20.0%		2.0	20.0%	4	17.4%	4.0	17.4%				
Juvenile Male		1	10.0%		1.0	10.0%	7	30.4%	7.0	30.4%				
Juvenile Female		0	0.0%		0.0	0.0%	0	0.0%	0.0	0.0%				
Juvenile Unknown Sex		6	60.0%		6.0	60.0%	1	4.3%	1.0	4.3%				
Pup Male		0	0.0%		0.0	00%	0	0.0%	0.0	0.0%				
Pup Female		0	0.0%		0 0	0.0%	0	0.0%	0.0	0.0%				
Pup Unknown Sex		0	0.0%		00	0.0%	0	0.0%	0.0	0.0%				
Male Unknown Age		0	00%		0.0	00%	0	0.0%	0 0	0.0%				
Female Unknown Age		0	0.0%		0 0	0.0%	0	0.0%	0.0	0.0%				
Unknown Sex and Age	1	0	0.0%		0 0	00%	0	0.0%	0.0	0.0%				
Total	-	10	100.0%	_	10.0	100.0%	23	100.0%	23.0	100.0%				

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

		SEA	LION		_	H	IARBO	R SEA	<u>L</u>		
•			Struck/	Total	_						
	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>		Year	Harvest	Lost	<u>Take</u>		
	1992	3.5	1.2	4.7		1992	36.2	4.7	40.8		
	1993	1.1	0.0	1.1		1993	30.6	3.2	33.7		
	1994	0.0	0.0	0.0		1994	15.5	5.2	20.7		
	1995	10.0	2.0	12.0		1995	23.0	0.0	23.0		

SOURCE: Alaska Department of Fish and Game, Division of **Subsistence**, Subsistence Study and **Monitor System** for Sea Liins and **Harbor** Seals in Alaska, with assistance from the **Port** Graham Village **Council** and Port Graham **Corporation**, 1995

Table 21. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seldovia, 1995

SAMPLING DESIGN TWO-STRATA	Total Sui Sample H	Native Households veyed Households Sampling Fraction ousehold Members ousehold Members	Active 12 12 100.0% 34 34.0	Other 29 29 100.0% 73 73.0	Total 41 41 100.0% 107 107.0	
HARVESTAND US	E INFORM	NATION				
Percentage of Nativ	e Househo	olds:	Estimated Co.	mmunity Harvest		
	Sea I	Harbor	and Take (Ex	(panded):	S e a	Harbor
	Lion	<u>Seal</u>			<u>Lion</u>	<u>Seal</u>
U	sed 14.6%	341%	T	otal Number Harvested	0.0	4.0
Hu	inted 0.0%	12.2%	Total N ı	umber Struck and Lost	0.0	0.0
Harve	sted 0.0%	4.9%		Total Number Taken	0.0	4.0
Rece	ived 14.6%	31.7%				
Gave	Away 2.4%	7.3%	Numbe	r Harvested Per Capita	0.00	0.04

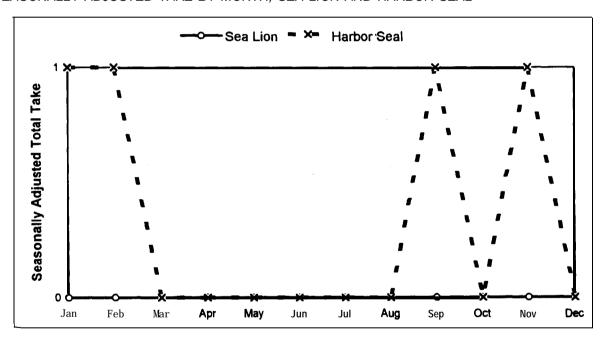
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	ARVEST AND	TAKE B	Y SAMP	LED HOUSE	HOLDS	(UNEXP	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	٥
ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)														
Harvest	0.0	0 0	0.0	00	00	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	00
Struck & Lost	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	00	0.0	0 0	0.0	0.0	0.0
Total Take	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0
STIMATED S	SEASONALI	Y ADJ	USTED	HARVEST	AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	00	0.0	00	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	00	0.0	0.0	0 0	0.0	0.0	0.0	0 0		0.0
Total Take	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)														***
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%))						-			•••		001		

HARBOR	SEAL H.	'ARVE	ST BY	MONT	TH	·							nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec M	onth	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPL	ED HOL	JSEHOL	DS (UNE	XPAND	ED)					
Harvest	1	1	0	0	0	0	0	0	1	0	1	0	0	4
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	1	0	0	0	0	0	0	1	0	1	0	0	4
ESTIMATED	HARVEST	AND T	TAKE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	1.0	1.0	0.0	0 0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	4.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0
Total Take	1.0	1.0	0.0	0.0	0.0	0.0	0 0	0 0	1.0	0.0	1.0	0.0	0.0	4.0
ESTIMATED	SEASONA	LLY AC	JUSTED	HARVE	ST AND	D TAKE	BY COM	MUNIT	Ү (ЕХРА	ANDED)				
Harvest	1.0	1.0	0.0	0.0	0.0	0.0	0 0	0 0	10	0.0	10	0.0		40
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	1.0	1.0	00	0.0	0.0	0.0	0.0	0.0	10	0.0	1.0	0.0		4.0
Total Take (%)	250%	25.0%	0.0%	6 0.0%	0.0%.	0.0%	0.0%	0.0%	25.0%	0.0% 2	25.0%	0.0%		100.0%
Cum Take	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3 0	3.0	4.0	4.0		
Cum. Take (%)											00.0% 100			

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Seldovia Native Association, 1995.

		Sea	Lion			Harbo	or Seal	
	Reporte	d by	Communi	ty Est	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expend	ded)	Samp	ole	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	•••	2	50.0%	2. 0	50.0%
Adult Female	0		0.0		1	25.0%	1.0	25.0%
Adult Unknown Sex	0	•==	0.0	•••	0	0.0%	0.0	0.0%
Juvenile Male	0	•••	0.0	•••	0	0.0%	0.0	0.0%
Juvenile Female	0		0.0		0	00%	0.0	0.0%
Juvenile Unknown Sex	0		0.0	***	0	0.0%	0.0	0.0%
Pup Male	0		0.0	-	1	25.0%	1.0	25.0%
Pup Female	0	***	0.0	•••	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0	•	0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0	•	0	0.0%	0.0	0.0%
Total	0		0.0		4	100.0%	4. 0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION			HARBO	R SEA	<u>\L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	Take
1992	0.0	0.0	0.0	1992	12.4	0.0	12.4
1993	0.0	0.0	0.0	1993	7. 9	4. 9	12. 8
1994	0.0	0.0	0.0	1994	8. 0	0.0	8. 0
1995	0.0	0.0	0.0	1995	4.0	0.0	4. 0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Seldovia Native Association, 1995

Table 22. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Seward, 1995

SAMPLING DESIG	GN:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	12	147	159	
	Surveyed Households	11	29	40	
	Sampling Fraction	91.7%	19.7%	25.2%	
	Sample Household Members	42	73	115	
E	stimated Household Members	45.8	370.0	415.9	

	4 4 4 5				
HARVEST	ANII)	HSF	INFOR	₹ΜΑ	TION

Percentage of Native Househo	olds:	Estimated Community Harvest		
Sea I	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>	, , ,	Lion	<u>Seal</u>
used 0.0%	13.7%	Total Number Harvested	0.0	10.9
Hunted 0.0%	0.7%	Total Number Struck and Lost	0.0	5.5
Harvested 0.0%	0.7%	Total Number Taken	0.0	16.4
Received 0.0%	13.0%			
Gave Away 0.0%	07%	Number Harvested Per Capita	0.00	0.03

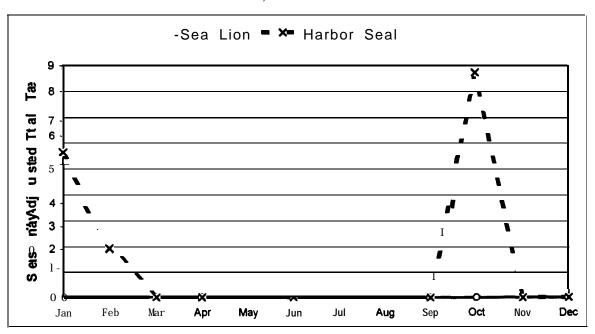
SEA LION	HARVE	STBY	Y MON	TH			•					Ur	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPLI	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	o	0	0	0	0	0	, 0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMMI	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	00′	0 0	0 0	0 0	0.0	0 0	0 0	0 0
Struck & Lost	0.0	00	0 0	00	0 0	0 0	0 0	0 0	00	0 0	0.0	0.0	0 0	0.0
Total Take	0.0	00	00	00	00	00	00	00	00	00	00	00	00	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0 0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0 0		0 0
Struck & Lost	0.0	0.0	0.0	00	0 0	00	0 0	0 0	00	00	0.0	0 0		0.0
Total Take	0.0	0.0	0.0	00	0 0	00	0 0	0 0	00	0.0	0 0	0.0		0.0
Total Take (%)		400				•••			_	***	***			
Cum. Take	0.0	0 0	0.0	0.0	0 0	0 0	0 0	0 0	00	0.0	0.0	0.0		
Cum Take (%)		_	•••	-	-	•		•••		***				

HARBOR	SEAL H			MON									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND T	TAKE BY	SAMP	LED HO	USEHOLE	1U) 20	IEXPAND	ED)					
Harvest	4	2	0 ′	0	0	0	0	0	0	4	0	0	0	10
Struck & Lost	1	0	0	0	0	0	0	0	0	4	0	0	0	5
Total Take	5	2	0	0	0	0	0	0	0	8	0	0	0	15
ESTIMATED	HARVEST	AND	TAKE BY	COMM	MUNITY ((EXPAND	ED)							
Harvest	4.4	2.2	0 0	0 0	0 0	0 0	0 0	0 0	0 0	4.4	0.0	0.0	0.0	10.9
Struck & Lost	1.1	0 0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	4.4	0.0	0.0	0.0	5.5
Total Take	5.5	2.2	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.7	0.0	0.0	0.0	164
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST ANI	D TAKE	BY C	TINUMMC	Ү (ЕХР	ANDED)				
Harvest	4 4	2.2	0.0	0.0	0 0	0 0	00	0 0	0 0	4 4	0 0	0.0		10.9
Struck & Lost	1.1	0.0	0.0	0.0	0.0	0 0	00	0 0	0 0	4 4	00	0.0		5 5
Total Take	5.5	2.2	0 0	00	0.0	0 0	00	0 0	00	9.7	0 0	0.0		164
Total Take ((%) 33.3%	13.3%	0.0%	0.0%	0.0%	00%	00%	00%	0.0%	53.3%	0.0%	0.0%		100.0%
Cum. Take	5.5	7.6	7.6	76	76	7.6	76	76	7.6	16.4	16.4	16.4		
Cum. Take	(%) 33.3%	6 46.7 %	46.7%	467%	46.7%	467% 46	7%	46 7%	467%	100.0%	100.0%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Qutekcak Native Tribe, 1995

		Se	a Lion			Harbo	r Seal	
	Reporte	dby	Communit	y Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expand	ied)	Sam	ple	(Expan	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		7'	70.0%	7. 6	70.0%
Adult Female	0		0.0	***	3	300%	3.3	30.0%
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%
Juvenile Female	0	***	0.0		0	00%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Pup Male	0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0		00		0	0.0%	0 0	0.0%
Female Unknown Age	0	_	00		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		00		0	0.0%	0.0	0.0%
Total	0		0.0		10	100.0%	10.9	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u></u>	HARBO	R SEA	\ L
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	2. 0	0.0	2. 0
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0
1994	0.0	0.0	0.0	1994	5. 0	0.0	5. 0
1995	0. 0.	0.0	0.0	1995	10. 9	5. 5	18. 4

SDURCE: Alaska Department of Fish and Game, **Division** of **Subsistence**, **Subsistence** Study and **Monitor** System for Sea Lii and **Harbor** Seals in Alaska, with assistance from the **Qutekcak Native** Tribe, **1995**

CENSUS

Total Native Households 25
Surveyed Households 19
Sampling Fraction 76.0%
Sample Household Members 57
Estimated Household Members 75.0

HARVESTAND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest
Sea Harbor and Take (Expanded): Sea Harbor
Lion Seal
Lion Seal

 Lion
 Seal
 Lion
 Seal

 Used
 36.8%
 84.2%
 Total Number Harvested
 2.6
 46.1

 Hunted
 5.3%
 26.3%
 Total Number Struck and Lost
 0.0
 2.6

 Harvested
 5.3%
 21.1%
 Total Number Taken
 2.6
 48.7

Received 36.8% 84.2%

Gave Away 5.3% 31.6% Number Harvested Par Capita 0.04 0.61

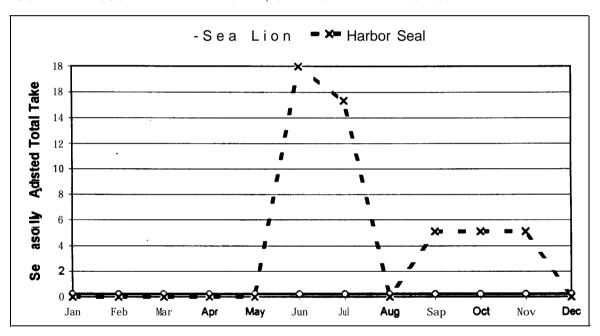
SEA LION HARVEST BY MONTH Unkn											inknown			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 1	Nonth	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HOU	SEHOLDS	(UNEXP	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	2	2′
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	2	2
ESTIMATED	HARVEST	AND	TAKE BY	COMN	MUNITY	(EXPAN	DED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
Struck & Lost	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AN	D TAKE	BY CO	OMMUNI	ГҮ (ЕХР	ANDED)				
Harvest	0.2	0.2	0.2	02	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		2.6
Struck & Lost	0.0	0.0	0.0	0.0	0 0	00	00	0.0	0.0	0.0	0.0	0.0		0 0
Total Take	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		26
Total Take (%)	8.3%	8.3%	8.3%	83%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%		100.0%
Cum Take	0.2	0 4	07	09	11	1.3	15	1.8	2.0	2.2	2 4	2.6		
Cum Take (%)	8.3%	167%	25.0%	333%	417%	500%	58.3%	66.7%	750%	83.3%	91.7%	100.0%		

LIADDOD	CEAL L	ADVE	CT DV	1401	F1 1								Halia airia	
HARBOR	SEAL TI	AKV⊏ Feb	Mar	Apr	l Π Maγ	Jun	Jul	Aug	Sep	Oct	Nov		Unknown Month	Total
REPORTED	HARVEST		TAKE BY	SAMPL		USEHOI		NEXPAN	•				onen	
							•		DED)					
Harvest	0	0	0	0	0	3	3	0	1	1	1	0	26	35
Struck & Lost	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Total Take	0	0	0	0	0	5	3	0	1	1	1	0	26	37
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY	(EXPAN	DED)							
Harvest	00	0.0	0.0	0.0	0.0	3.9	3.9	0.0	1.3	1.3	1.3	0.0	34.2	46.1
Struck & Lost	0.0	0.0	0.0	0 0	0 0	26	0.0	00	0.0	0.0	0 0	0.0	0.0	2.6
Total Take	0.0	0.0	0.0	0 0	0.0	66	3 9	0.0	1.3	1.3	1.3	0.0	34.2	48.7
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AN	D TAKE	BY CO	OMMUNI	TY (EXF	ANDED)				
Harvest	0. 0	0.0	0.0	0.0	0.0	154	154	0.0	5.1	5.1	5.1	0.0		46.1
Struck & Lost	0.0	0.0	0.0	0.0	0 0	2.6	00	0.0	0.0	0.0	0.0	0.0		26
Total Take	0.0	0.0	0.0	0.0	0 0	18.0	15.4	0.0	5.1	5.1	5.1	0.0		48.7
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	36.9%	31.5%	0.0%	10.5%	10.5%	10.5%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0.0	0.0	la.0	33.3	33.3	38.5	43.6	48.7	48.7		
Cum. Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	36.9%	68.5%	68.5%	79.0%	89.5%	100.0%	100.0%		

SOURCE. Alaska Department of Fish and Game, Division of Subsrstence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals m Alaska, with assistance from the Tatitlek IRA Council, 1995

	-	Sea	Lion		Harbor Seal						
	Reporte	ed by	Commun	ity Est.	Report	ed by	Commun	ity Est.			
	Sam	ple	(Expar	ided)	Sam	ple	(Ехраг	nded)			
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0	0.0%	0.0	0.0%	1	2.9%	1.3	2.9%			
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Adult Unknown Sex	0	0.0%	0.0	0.0%	5	14. 3%	6.6	14. 3%			
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%			
Pup Male	0	0.0%	0.0	0.0%	1	2. 9%	1.3	2.9%			
Pup Female	0	00%	0.0	0.0%	0	0. 0%	0.0	0.0%			
Pup Unknown Sex	0	0.0%	0.0	0.0%	1	2. 9%	1.3	2.9%			
Male Unknown Age	0	0.0%	0.0	0.0%	0	0. 0%	0.0	0.0%			
Female Unknown Age	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%			
Unknown Sex and Age	2	1000%	2. 6	100.0%	27	77. 1%	35. 5	77. 1%			
Total	2	100.0%	2. 6	100.0%	35	100.0%	46.1	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u></u>	HARBOR SEA				
		Struck/	Total			struck/	Total		
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>		
1992	8.3	4.2	12.5	1992	152.9	17.7	170.6		
1993	4.1	1.0	5.2	1993	110.8	15.5	126.4		
1994	8.8	7.4	16.2	1994	145.9	30.9	176.8		
1995	2.6	0.0	2.6	1995	46. 1	2.6	48.7		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Tatitlek IRA Council, 1995

Table 24. SEA LION AND HARBOR SEAL HARVEST ESTIMATES: Valdez, 1995

CHAIN REFERRAL Total Referred Households 6
Surveyed Households 5

Sampling Fraction 63.3%
Sample Household Members 22
Estimated Household Members 26.4

HARVEST AND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea Harbor and Take (Expanded): Sea Harbor <u>Lion</u> Seal **Lion** Seal used 0.0% 40.0% Total Number Harvested 0.0 16.8 Hunted 0.0% Total Number Struck and Lost 40.0% 0.0 Harvested 0.0% Total Number Taken 40.0% 16.6

N/A

Received 0.0% 0.0%

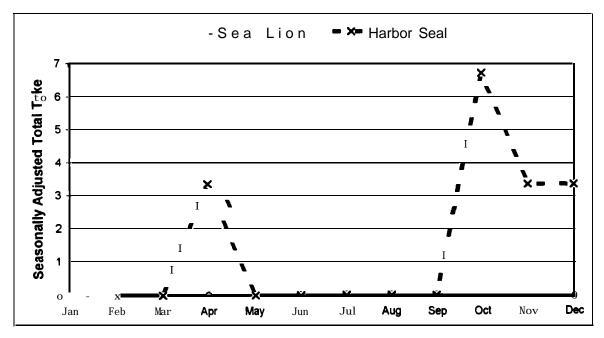
Gave Away 0.0% 40.0% Number Hatvested Per Capita N/A

SEA LION	I HARVE Jan	ST BY	′ MON Mar	TH Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Jnknown VI o n t h	Total
REPORTED HA								9			1101	500 .		Total
Harvest	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMN	JUNITY	(EXPAND	DED)							
Harvest	0.0	0.0	0 0	0 0	0.0	0.0	0 0	0 0	0 0	0.0	0.6	0.0	0.0	0.0
Struck & Lost	0.0	0 0	0 0	00	0.0	0 0	0 0	0 0	0.0	0 0	0.0	0 0	0.0	0.0
Total Take	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0
ESTIMATED	SEASONA	LLY AD.	JUSTED	HARV	EST AN	D TAKE	ву со	MMUNIT	Y (EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	00	0 0	0 0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take(%)			***			•••			***					
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0 0	0.0	0.0		
Cum. Take (%)			•••				_							
	CEAL L				ITII									,
HARBOR	SEAL H Jan	Feb	Mar Mar	Apr	/ / May	Jun	Jul	Aug	Sep	Oct	Nov		Unknown M o n t h	Total
REPORTED	HARVEST	AND T	AKE BY	SAMF	PLED HO	USEHOL	DS (UI	NEXPAND	DED)					
Harvest	0	0	0	2	0	0	0	0	0	4	2	2	4	14
struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	2	0	0	0	0	0	4	2	2	4	14
ESTIMATED	HARVEST	AND T	AKE BY	у сомі	MUNITY	(EXPAN	DED)							
Harvest	0.0	0.0	0.0	2 4	0.0	0.0	0.0	0.0	0.0	4.0	2.4	2.4	4.0	16.8
Struck a Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	4.8	2.4	2.4	4.0	16.8
ESTIMATED	SEASONA	LLY AD	JUSTED	HARV	/EST AN	D TAKE	BY CO	оммиліт	ΓΥ (EXP	ANDED)				
Harvest	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	67	3.4	3.4		16.8
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	6.7	3.4	3.4		16.6
Total Take (%)	0.0%	0.0%	00%	200%	0.0%	0.0%	00%	0.0%	0.0%	40.0%	20.0%	20.0%		100.0%
Cum. Take	0.0	0.0	0.0	3 4	3 4	3.4	3 4	3 4	3.4	10.1	13.4	16.8		
Cum. lake (%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	60.0%	80.0%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Valdez Native Association, 1995.

		Sea	Lion		Harbor Seal				
	Reporte Samp	•	Communi (Expan	•	Reporte Sam	•	Community E: (Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0	***	0.0	•	5	35.7%	6. 0	35.7%	
Adult Female	0		0.0		4	26. 6%	4. 0	28.6%	
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Juvenile Male	0		0.0		1	7.1%	1.2	7.1%	
Juvenile Female	0	_	0.0	-	0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0		0 0		0	0.0%	0.0	0.0%	
Pup Male	0	•••	0 0	***	0	0.0%	0.0	0.0%	
Pup Female	0		0.0		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Male Unknown Age	0		0.0	_	0	0.0%	0.0	0.0%	
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%	
Unknown Sex and Age	0		0.0	_	4	28.6%	4.0	28.6%	
Total	0		0.0		14	100.0%	16.8	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u>_</u>	HARBOR SEAL					
•		Struck/	Total			Struck/ Total				
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0			
1993	0.0	0.0	0.0	1993	21.0	4. 0	25. 0			
1994	0.0	0.0	0.0	1994	30.0	3.0	33. 0			
1996	0.0	0.0	0.0	1995	16.6	0.0	16.6			

SOURCE- Alaska Department of Fish and Game, **Division** of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with **assistance** from the **Valdez Native Association**, 1995

Table 25. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Anchorage, 1995

CHAIN REFERRAL Total Referred Households 24

Surveyed Households 13

Sampling Fraction 54.2%

Sample Household Members 52

Estimated Household Members 96.0

HARVEST AND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

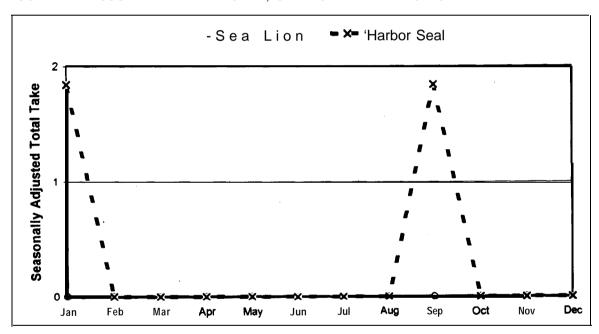
Sea Harbor and Take (Expanded): See Harbor Lion <u>Seal</u> Lion <u>Seal</u> Total Number Harvested used 23.1% 46.2% 0.0 3.7 Hunted 7 7% **Total Numb Struck and Lost** 0.0 0.0 30.8% Harvested 0.0% Total Number Taken 0.0 15.4% 3.7 Received 23.1% 46.2% Gave Away 15 4% 38.5% Number Harvested Per Capita N/A N/A

SEA LION									_				nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	Dac	Month	Total
REPORTED HAR				ED HOU	SEHOLDS	(UNEXPA	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMN	IUNITY	(EXPANI	DED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0 0	00	0.0	0.0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	00	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
ESTIMATED S	SEASONA	LLY A	DJUSTED	HARV	EST ANI	D TAKE	ву сс	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	0 0	0 0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0		00
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)	***	•••	_		•••									_
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0		
Cum. Take(%)				***				***		_		***		
HADROD	SEAL L	IA D\/E	ST RV	MON	TU							11	nknown	
HARBOR .	SEAL F	IARVE Feb	ST BY Mar	MON Abr	TH Mav	Jun	Jul	Aug	Sep	Oct	Nov		nknown 1 o n t h	Total
HARBOR .	Jan	Feb		Abr	Mav			Aug NEXPANI		Oct	Nov			Total
	Jan	Feb	Mar	Abr	Mav					Oct 0	Nov 0			Total 2
REPORTED H	Jan HARVEST	Feb AND	Mar TAKE BY	Abr SAMP	Mav LED HC	USEHO	LDS (UI	NEXPAND	DED)			Dec N	lonth	
REPORTED H	Jan HARVEST	Feb AND 7	Mar TAKE BY 0	Abr SAMP	Mav LED HC 0	OUSEHO	LDS (UI 0	NEXPANI 0	DED)	0	0	Dec N	onth 0	2
REPORTED I	Jan HARVEST 1 0	AND 0 0 0	Mar TAKE BY 0 0 0	Abr SAMP 0 0 0	Mav LED HC 0 0	OUSEHOI 0 0	LDS (UI 0 0 0	NEXPANI 0 0	DED) 1 0	0	0	0 0	0 0	2
REPORTED H Harvest Struck & Lost Total Take	Jan HARVEST 1 0	AND 0 0 0	Mar TAKE BY 0 0 0	Abr SAMP 0 0 0	Mav LED HC 0 0	OUSEHOI 0 0 0	LDS (UI 0 0 0	NEXPANI 0 0	DED) 1 0	0	0	0 0	0 0	2
REPORTED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 0 1 HARVEST	AND 0 0 0 AND	Mar TAKE BY 0 0 0 TAKE BY	Abr SAMP 0 0 0 0 7 COMM	Mav LED HC 0 0 0	OUSEHO 0 0 0 0	LDS (UI 0 0 0 0 DED)	NEXPAND 0 0 0	DED) 1 0 1	0 0 0	0 0 0	0 0 0	0 0 0	2 0 2
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 0 1 HARVEST 1.8	AND 0 0 0 AND 0.0	Mar TAKE BY 0 0 0 TAKE BY	Abr SAMP 0 0 0 0 0 COMM 0.0	Mav LED HC 0 0 0 0 /UNITY 0.0	OUSEHO 0 0 0 0 (EXPAN 00	LDS (UI 0 0 0 0 DED)	0 0 0 0	DED) 1 0 1	0 0 0	0 0 0	0 0 0	0 0 0	2 0 2
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 0 1 HARVEST 1.8 0.0 1.8	Feb AND 0 0 0 AND 0 0 0 0 0 0 0 0 0 0 0 0 0	Mar TAKE BY 0 0 TAKE BY 0.0 0.0	Abr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Mav LED HC 0 0 0 0 IUNITY 0.0	0 0 0 0 (EXPAN 00 00	DED) 00 00 00 00 00	0 0 0 0	DED) 1 0 1 18 0.0 1.8	0 0 0	0 0 0	0 0 0 0	0 0 0 0	2 0 2 3.7 00
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 0 1 HARVEST 1.8 0.0 1.8	Feb AND 0 0 0 AND 0 0 0 0 0 0 0 0 0 0 0 0 0	Mar TAKE BY 0 0 TAKE BY 0.0 0.0	Abr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	May LED HC 0 0 0 //UNITY 0.0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 (EXPAN 00 00	DED) 00 00 00 00 00	0 0 0 0	DED) 1 0 1 18 0.0 1.8	0 0 0 0.0 0.0	0 0 0	0 0 0 0	0 0 0 0	2 0 2 3.7 00
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED	Jan HARVEST 0 1 HARVEST 1.8 0.0 1.8 SEASONA	Feb AND 0 0 0 0 0 AND 0.0 0.0 0.0 ALLY A	Mar TAKE BY 0 0 TAKE BY 0.0 0.0 DJUSTED	Abr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	May LED HC 0 0 0 MUNITY 0.0 00 00 EST AN	OUSEHOD 0 0 0 (EXPAN 00 00 00 D TAKE	DED) 00 00 00 00 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DED) 1 0 1 18 0.0 1.8 TY (EXF	0 0 0 0.0 0.0 0.0 PANDED)	0 0 0 0.0 0.0	0 0 0 0 0.0 0.0	0 0 0 0	2 0 2 3.7 00 3.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest	Jan HARVEST 0 1 HARVEST 1.8 0.0 1.8 SEASONA 1.8	Feb AND 0 0 0 AND 0.0 0.0 0.0 ALLY A 0.0	MAR TAKE BY 0 0 TAKE BY 0.0 0.0 0.0 DJUSTED 0.0	Abr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	May LED HC 0 0 0 MUNITY 0.0 00 EST AN	OUSEHOD O O (EXPAN OO OO OO D TAKE	DED) 00 00 00 00 00 00 00 00 00 00 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DED) 1 0 1 18 0.0 1.8 TY (EXF	0 0 0 0.0 0.0 0.0 PANDED)	0 0 0 0.0 0.0 0.0	0 0 0 0 0.0 0.0 0.0	0 0 0 0	2 0 2 3.7 00 3.7
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 0 1 HARVEST 1.8 0.0 1.8 SEASONA 1.8 0.0	AND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Mar TAKE BY 0 0 TAKE BY 0.0 0.0 0.0 DJUSTED 0.0 0.0	Abr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	May LED HC 0 0 0 MUNITY 0.0 00 EST AN 00 00	0 0 0 0 (EXPAN 00 00 00 D TAKE	DED) 00 00 00 00 00 00 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DED) 1 0 1 18 0.0 1.8 TY (EXF	0 0 0.0 0.0 0.0 0.0 PANDED)	0 0 0 0.0 0.0 0.0	0 0 0 0 0.0 0.0 0.0	0 0 0 0	2 0 2 3.7 00 3.7 3.7 0.0
REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 1 0 1 HARVEST 1.8 0.0 1.8 SEASONA 1.8 0.0 1.8	Feb AND 0 0 0 AND 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	MAR TAKE BY 0 0 TAKE BY 0.0 0.0 0.0 DJUSTED 0.0 0.0 0.0	Abr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	May LED HC 0 0 0 MUNITY 0.0 00 00 EST AN 00 00 00	0 0 0 0 (EXPAN 00 00 00 D TAKE 00 00	DED) 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DED) 1 0 1 18 0.0 1.8 TY (EXF 1.8 0.0 1.8	0 0 0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0.0 0.0 0.0 0.0	0 0 0 0 0.0 0.0 0.0 0.0	0 0 0 0	2 0 2 3.7 00 3.7 3.7 0.0 3.7

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Absk a, with assistance from the Cook Inlet Tribal Council and Alaska Federation of Natives, 1995.

		Sea	Lion		Harbor Seal				
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.	
	Samp	ole	(Expan	ded)	Sam	ple	(Expar	ided)	
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		1	50.0%	1.8	50.0%	
Adult Female	0		00	_	0	0.0%	0.0	0.0%	
Adult Unknown Sex	0		00	•••	0	0.0%	0.0	0.0%	
Juvenile Male	0		00	***	0	0.0%	0.0	0.0%	
Juvenile Female	0	_	00		0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0		0.0	•••	0	0.0%	0.0	0.0%	
Pup Male	0	•••	00		0	0.0%	0.0	0.0%	
Pup Female	0		00		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0		00	-	0	0.0%	0.0	0.0%	
Male Unknown Age	0	•••	00		0	0.0%	0.0	0.0%	
Female Unknown Age	0	_	00		0	0.0%	0 0	0.0%	
Unknown Sex and Age	. 0	***	00	-	1	50.0%	1.8	50.0%	
Total	0		00		2	1000%	3.7	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBOR SEAL					
		Struck/	Total				Struck/	Total		
<u>Year</u>	Harvest	Lost	<u>Take</u>	2	Year	Harvest	Lost	<u>Take</u>		
1992	5.7	3.0	9.5	1	1992	17.1	0.0	17.1		
1993	7.8	3.3	11.1	1	1993	24.4	5.6	30.0		
1994	1.4	0.0	1.4	1	1994	4.2	0.0	4.2		
1995	0.0	0.0	0.0	1	995	3.7	0.0	3.7		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Cook Inlet Tribal Council and Alaska Federation of Natives, 1995

CHAIN REFERRAL Total Referred Households 4

Surveyed Households 3
Sampling Fraction 75.0%

Sample Household Members 11
Estimated Household Members 14.7

HARVEST AND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest

Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	Seal
used 66.7%	1000%	Total Number Harvested	0.0	0.0
Hunted 33.3%	66.7%	Total Number Struck and Lost	0.0	0.0
Harvested 0.0%	0.0%	Total Number Taken	0.0	0.0
Received 66.7%	100.0%			
Gave Away 00%	0.0%	Number Harvested Per Capita	N/A	N/A

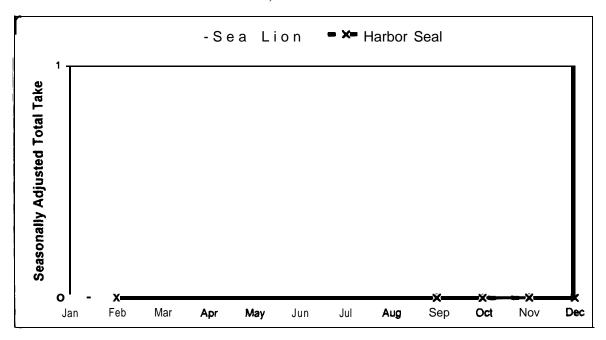
SEA LION	HARVE			TH				•					Unknown	
	Jam	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE B	Y SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND TA	KE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	00	00	0.0	0.0	0 0	0.0	0.0
Struck & Lost	0.0	00	0.0	0 0	0 0	00	0 0	00	00	00	0.0	0.0	0 0	0.0
Total Take	00	0.0	0.0	0 0	0 0	00	0 0	00	0.0	0.0	0 0	0 0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	00	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	0.0	00	0 0	0.0	0.0	0.0	0.0	0 0		0.0
Total Take (%)				-		~-	-			***				
Cum Take	0.0	0.0	0.0	00	0.0	0 0	00	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)						***				•••				

HARBOR	SEAL H	ARVE	STBY	MONT	Ή							Un	known	
	Jan	Feb	Mar	Apr	May	Jun	إزال	Aug	Sep	Oct	Nov	Dec M	o n t h	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	.ED HOU	SEHOL	DS (UNI	EXPANDE	D)					
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY (E	XPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0 0	00	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0 0	00	0 0	00	00	0.0	0.0	0.0	0 0	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	00	0 0	00	00	0.0	0 0	0.0	0.0	0.0
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0 0	0.0	00	00	0 0	00	0.0	00	0 0	0 0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	00	00	0 0	00	0.0	00	0.0	0.0		0.0
Total Take	00	0.0	0.0	0.0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0		0.0
Total Take (%)				_										
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0		
Cum. Ta	ake (%)	-		-	***						940			<u>.</u>

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska 1,

		Sea	Lion		Harbor Seal				
	Reporte	d by	Communit	y Est.	Reporte	d by	Community Est.		
	Samı	ole	(Expan	ded)	Samp	ole	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		0	-	0.0		
Adult Female	0		0.0	***	0	-	0.0		
Adult Unknown Sex	0		0.0		0	***	0.0		
Juvenile Male	0		0.0		0	-	0.0		
Juvenile Female	0	~~	0 0	***	0	•	0.0		
Juvenile Unknown Sex	0		0.0	***	0	***	0.0		
Pup Male	0		0.0	***	٥		0.0		
Pup Female	0	-	0.0	***	0		0.0		
Pup Unknown Sex	0		0.0	***	0	-	0.0	-	
Male Unknown Age	0	***	0.0	•••	0		0.0		
Female Unknown Age	0	***	0.0		0		0.0		
Unknown Sex and Age	0		0.0		0		0.0	-	
Total	0		0.0	-	0		0.0	,	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION	HARBOR SEAL					
		struck/	Total			Struck/	Total	
<u>Year</u>	Harvest	Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	<u>Take</u>	
1992			***	1992			~	
1993	0.0	0.0	0.0	1993	4.8	0.0	4.0	
1994	0.0	0.0	0.0	1994	12.0	0.0	12.0	
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	

SOURCE: Alaska **Department** of Fish and **Game**, **Division** of Subsistence, Subsistence **Study** end Monitor System for Sea **Lions** and Harbor Seals in **Alaska** 1995.

CENSUS
Total Native Households
19
Surveyed Households
19
Sampling Fraction
100.0%

Sample Household Members 62 Estimated Household Members 62.0

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest Sea Harbor and Take (Expanded): Sea Harbor Lion Seal **Lion** Seal used 211% **Total Number Harvested** 5.0 36.8% 1.0 Hunted 10.5% **Total Number Struck and Lost** 31.6% 1.0 0.0 Total Number Taken Harvested 5.3% 2.0 5.0 21.1%

Received 15.6% 15.8% Gave Away 5.3% 10.5%

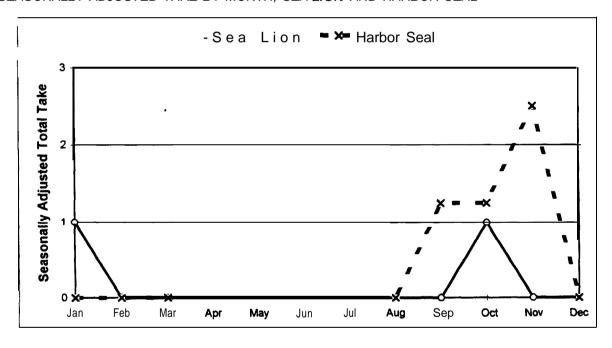
10.5% Number Harvested Per Capita 0.02 0.08

SEA LION	V HARVE	ST BY	/ MON	ГΗ									Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	ARVEST AND	TAKE B	Y SAMPLE	D HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Struck & Lost	0	0	0	٥	0	0	0	0	0	1	0	0	0	1
Total Take	1	0	0	0	0	0	0	0	0	1	0	0	0	2
ESTIMATED) HARVEST	AND T	AKE BY	COMM	IUNITY (EXPAND	DED)							
Harvest	1.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	00	0.0	1.0
Struck & Lost	0 0	0 0	0 0	0 0	0 0	00	0.0	0 0	0.0	1.0	0.0	0.0	0.0	1.0
Total Take	1.0	0.0	0 0	00	0 0	00	0 0	0 0	0.0	1.0	0.0	0.0	0.0	2.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	EST AND	TAKE	BY CO	тилими	Y (EXPA	ANDED)				
Harvest	1.0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0 0	0.0		1.0
Slruck & Lost	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0 0	0.0	1.0	0.0	0.0		1.0
Total Take	1.0	0.0	0.0	0 0	0 0	00	0.0	0.0	0.0	1.0	0.0	0.0		2.0
Total Take (%)	50.0%	0.0%	00%	00%	00%	00%	0.0%	00%	0.0%	50.0%	0.0%	0.0%		100.0%
Cum. Take	1.0	1.0	1.0	10	10	10	1.0	1.0	1.0	20	2.0	2.0		
Cum Take(%) 50.0%	50.0%	50.0%	500%	50 0%	500%	500%	50.0%	50.0% 1	000%	100.0%	100.0%		
HARBOR	SENI H	IADVE	ST BV	MON	TU								Unknown	
INANDON	Jan	Feb	Mar	Apr	May	Jun	Jut	Aug	Sep	Ckt	Nov		Month	Total
REPORTED	HARVEST	AND T	AKF BY	CVMD		псепоі								
Harvest		,,,,,	/L D.	SAMP	LED HO	OSEHOL	DS (U	NEXPANI	DED)					
Charles O Land	0	0	0	O O	0 LED HO	0 0	DS (U 0	NEXPANI 0	DED)	1	2	0	1	5
Struck & Lost	0						•		,	1 0	2	0	1 0	5 0
Total Take		0	0	0	0	0	0	0	1					
	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0	0 0	0 0	1	0	0	0	0	0
Total Take	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0	0 0	1	0	0	0	0	0
Total Take ESTIMATED	0 0 HARVEST	0 0 0 AND	0 0 0 TAKE BY	0 0 0 COMN	0 0 0 MUNITY	0 0 0 (EXPAN	0 0 0 DED)	0 0 0	1 0 1	0 1	0 2	0	0 1	0 5
Total Take ESTIMATED Harvest	0 0 HARVEST	0 0 0 AND 7	0 0 0 TAKE BY	0 0 0 COMN	0 0 0 MUNITY	0 0 0 (EXPAN	0 0 0 DED)	0 0 0	1 0 1.0	0 1	2.0	0.0	0 1	0 5 5.0
Total Take ESTIMATED Harvest Struck & Lost	0 0 HARVEST 0.0 0.0	0 0 0 AND 7 0.0 0.0	0 0 0 FAKE BY 0.0 0.0	0 0 0 COMM 0 0 0 0	0 0 0 MUNITY 0 0 0 0	0 0 0 (EXPAN 0 0 0 0	0 0 0 DED) 0 0	0 0 0	1.0 0 0 1.0	0 1 10 0.0	2.0 0.0 2.0	0 0 0.0 0.0	0 1 1 0 0.0	0 5 5.0 0.0
Total Take ESTIMATED Harvest Struck & Lost Total Take	0 0 HARVEST 0.0 0.0	0 0 0 AND 7 0.0 0.0	0 0 0 FAKE BY 0.0 0.0	0 0 0 COMM 0 0 0 0	0 0 0 MUNITY 0 0 0 0	0 0 0 (EXPAN 0 0 0 0	0 0 0 DED) 0 0	0 0 0 0.0 0.0 0 0	1.0 0 0 1.0	0 1 10 0.0 1.0	2.0 0.0 2.0	0 0 0.0 0.0	0 1 1 0 0.0	0 5 5.0 0.0
Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED	0 0 HARVEST 0.0 0.0 0.0	0 0 0 AND 1 0.0 0.0 0.0	0 0 0 7AKE BY 0.0 0.0 0.0	0 0 0 COMM 0 0 0 0	0 0 0 MUNITY 0 0 0 0	0 0 0 (EXPAN 00 00	0 0 0 DED) 0 0 0 0 0	0 0 0 0.0 0.0 0 0 0 0	1.0 0 0 1.0 0 0 1.0	0 1 10 0.0 1.0 ANDED)	2.0 0.0 2.0	0 0 0.0 0.0 0.0	0 1 1 0 0.0	5.0 0.0 5 0
Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest	0 0 HARVEST 0.0 0.0 0.0 SEASONA 0.0	0 0 0 AND 7 0.0 0.0 0.0	0 0 0 FAKE BY 0.0 0.0 0.0 DJUSTED 0.0	0 0 0 COMM 0 0 0 0 0 0	0 0 0 MUNITY 0 0 0 0 0 0	0 0 0 (EXPAN 00 00 D TAKE	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0 0 0 0 0 0	1.0 0 0 1.0 0 0 1.0 TY (EXP)	0 1 10 0.0 1.0 ANDED)	2.0 0.0 2.0	0 0.0 0.0 0.0 0.0	0 1 1 0 0.0	0 5 5.0 0.0 5 0
Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	0 0 0 HARVEST 0.0 0.0 0.0 SEASONA 0.0 0.0	0 0 0 AND 7 0.0 0.0 0.0	0 0 0 TAKE BY 0.0 0.0 0.0 DJUSTED 0.0	0 0 0 COMM 0 0 0 0 HARV 0 0	0 0 0 MUNITY 0 0 0 0 EST ANI 0 0	0 0 0 (EXPAN 00 00 TAKE 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0 0 0 0 0 0 0.0 0.0	1.0 0 0 1.0 1.0 1.0 1.3 0 0 1.3	0 1 0.0 1.0 ANDED) 1.3 0.0	2.0 0.0 2.0 2.5 0.0 2.5	0 0 0.0 0.0 0.0 0.0	0 1 1 0 0.0	5.0 0.0 5 0
Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	0 0 0 HARVEST 0.0 0.0 0.0 SEASONA 0.0 0.0	0 0 0 AND 7 0.0 0.0 0.0 0.0	0 0 0 7AKE BY 0.0 0.0 0.0 0.0 0.0	0 0 0 COMN 0 0 0 0 0 0 HARV 0 0 0 0	0 0 0 MUNITY 0 0 0 0 0 0 EST AN 0 0 0.0	0 0 0 (EXPAN 00 00 TAKE 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0 0 0 0 0.0 0.0 0.0	1.0 0 0 1.0 1.0 1.0 1.3 0 0 1.3	0 1 10 0.0 1.0 ANDED) 1.3 0.0	2.0 0.0 2.0 2.5 0.0 2.5	0 0 0.0 0.0 0.0 0.0 0.0	0 1 1 0 0.0 1.0	5.0 0.0 5 0 5 0 0 0 5.0
Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take Total Take	0 0 0 HARVEST 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 AND 7 0.0 0.0 0.0 0.0 0.0	0 0 0 7AKE BY 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 COMN 0 0 0 0 0 0 HARV 0 0 0 0 0 0	0 0 0 MUNITY 0 0 0 0 0 EST ANI 0 0 0.0 0.0	0 0 0 (EXPAN 00 00 0 D TAKE 00 00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0 0 0.0 0.0 0.0 0.0%	1.0 0 0 1.0 1.0 1.3 0 0 1.3 25.0%	0 1 10 0.0 1.0 ANDED) 1.3 0.0 1.3 25.0%	2.0 0.0 2.0 2.5 0.0 2.5 50.0%	0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0%	0 1 10 0.0 1.0	5.0 0.0 5 0 5 0 0 0 5.0

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsatence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of Akhiok and Akhiok Tribal Council, 1995

		Se	a Lion			Harbo	r Seal	
	Report	ed by	Commun	ity Est.	Report	ed by	Commur	ity Est
	Sam	ple	(Expanded)	San	nple	(Expa	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	100.0%	1.0	100.0%	3	60.0%	3.0	50.0%
Adult Female	0	00%	0.0	0.0%	1	20.0%	1.0	20.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	00%	0.0	0.0%	. 0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	1	20.0%	1.0	20.0%
Total	1	100.0%	1.0	100.0%	5	100.0%	5.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			ARBO	R SEA	<u>ال</u>	
		Struck/	Total				Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Yea	<u>ar</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	3.0	1 .0	4.0	199	92	20.0	3.0	23.0
1993	0.0	0.0	0.0	199	93	13.3	0.0	13.3
1994	3.2	0.0	3.2	199	94	14.5	0.0	14.5
1995	1.0	1.0	2.0	199	95	5.0	0.0	5.0

SOURCE: Alaska **Department** of Fish and Game, **Division** of **Subsistence**, **Subsistence** Study and Monitor System for Sea Liis and Harbor Seals in **Alaska**, with assistance **from** the City of **Akhiok** and Akhiok Tribal Council, **1995**.

CENSUS

Total Native Households

Surveyed Households

Sampling Fraction

Sample Household Members

53

Sample Household Members 53 Estimated Household Members 59.6

HARVEST AND USE INFORMATION

Percentage of Native Househ	olds:	Estimated Community Harvest		
Sea	Ha∨	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	&!a!		Lion	Seal
used 0.0%	37.5%	Total Number Harvested	0.0	26.1
Hunted 0.0%	43.8%	Total Number Struck and Lost	0.0	6.8
Harvested 0.0%	430%	Total Number Taken	0.0	34.9
Received 0.0%	18.0%			
Gave Away 0.0%	12.5%	Number Harvested Per Capita	0.00	0.47

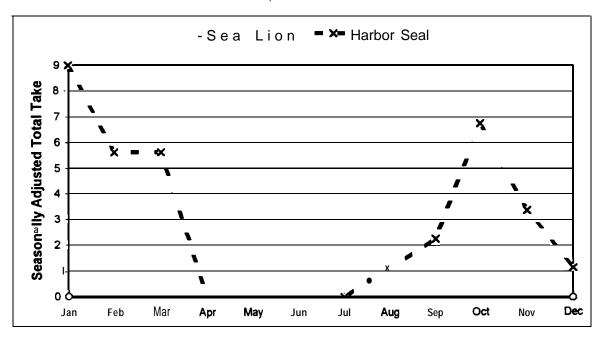
SEA LION	HARVE	STB	Y MONT	TH .								Ur	known	
=	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPLE	D HOUSE	HOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	Ø
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMMUI	VITY (EXPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	00
Total Take	0.0	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONAI	LLY AI	DJUSTED	HARVES	T AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0		0.0
Struck & Lost	0 0	0 0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)			***	_										
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)		***	***					***		_				

HARBOR	SEAL I	HARVI	EST BY	MON	TH							Į	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec I	Month	Total
REPORTED	HARVES	ΓAND	TAKE BY	SAMP	LED HOU	JSEHOL	DS (UN	EXPAND	ED)					
Harvest	5	3	5	0	0	0	0	1	2	5	3	1	0	25
Struck & Lost	3	2	0	0	0	0	0	0	0	1	0	0	0	6
Total Take	8	5	5	0	0	0	0	1	2	6	3	1	0	31
ESTIMATED	HARVES	T AND	TAKE BY	COMN	IUNITY (EXPAND	DED)							
Harvest	5.6	3 4	5.6	0.0	0.0	00	0 0	11	2.3	5.6	3.4	1.1	0.0	26.1
Struck & Lost	3.4	23	0.0	0.0	0.0	0.0	0.0	0 0	0 0	1.1	0.0	0.0	0.0	6.8
Total Take	9.0	5.6	5.6	0.0	0.0	0.0	0.0	1.1	2.3	6.8	3.4	1.1	0.0	34.9
ESTIMATED	SEASON	ALLY A	ADJUSTED	HARV	EST AND	TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	5.6	3 4	5.6	0.0	0.0	0.0	0.0	1.1	2.3	5.6	3.4	1.1		28.1
Struck & Lost	3.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0		6.8
Total Take	9.0	5.6	5.6	0.0	0.0	0.0	0.0	1.1	2.3	6.8	3.4	11		34.9
Total Take (%)	25.6%	16.1%	16 1%	0.0%	0.0%	0.0%	0.0%	3.2%	6.5%	194%	97%	3.2%		100.0%
Cum Take	9.0	14.6	20.3	20.3	20.3	20.3	20.3	21.4	236	30.4	33.8	34.9		
Cum.Take(%)	25.8%	41.9%	581%	58.1%	58.1%	58.1%	58.1%	61.3%	67.7%	871%	96.8%	100.0%		
SOURCE: Ala	eka Denari	ment of F	ish and Gam	e Divisi	on of Subsi	stence S	ubsistenc	Study and	Monitor	System f	or Sea Lin	ns and Ha	rbor Seals	in Alaska

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Karluk IRA Council, 1995.

		Sea	a Lion		Harbor Seal				
	Reporte	d by	Communit	y Est	Reporte	ed by	Commun	ty Est.	
	Samp	ole	(Expand	ied)	Samp	ole	(Ехрап	ded)	
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		19	76.0%	21.4	76.0%	
Adult Female	0		00		6	24.0%	6.8	24.0%	
Adult Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Juvenile Male	0		0 0		0	0.0%	0.0	0.0%	
Juvenile Female	0		0.0	•••	0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0		0 0		0	0.0%	0.0	0.0%	
Pup Male	0		0.0	***	0	0.0%	0.0	0.0%	
Pup Female	0		0.0	•••	0	0.0%	0.0	0.0%	
Pup Unknown Sex	0	_	0.0		0	0.0%	0.0	0.0%	
Male Unknown Age	0	•••	0.0		0	0.0%	0.0	0.0%	
Female Unknown Age	0	-	0.0	***	0	0.0%	0.0	0.0%	
Unknown Sex and Age	0	•••	0.0	•••	0	0.0%	0.0	0.0%	
Total	0		0.0		25	100.0%	28.1	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL'



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBOR SEAL			
		Struck/	Total			Struck/	Total	
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	
1992	0.0	0.0	0.0	1992	16.5	1.5	18.0	
1993	0.0	0.0	0.0	1993	10.0	1.3	11.3	
1994	0.0	0.0	0.0	1994	7.5	0.0	7.5	
1995	0.0	0.0	0.0	1995	28.1	8.8	34.9	

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska.

with assetance from the Karluk IRA Council, 1995

Table 29. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Kodiak City, 1995

SAMPLING DESIGN: CHAIN REFERRAL

Harvest

Struck & Lost

Total Take (%)

Cum. Take (%)

Total Take

Cum. Take

0.0

0.0

00

0.0

0.0%

0.0%

0.0

0.0

0.0

0.0

0.0%

0.0%

0.0

0.0

0.0

0.0%

0.0

0.0%

Total Referred Households
Surveyed Households
Sampling Fraction
Sample Household Members
42
Estimated Household Members
46.2

HARVESTAND USE INFORMATION

Percentage of Sample Households: Estimated Community Harvest Sea Harbor and Take (Expanded): Sea Harbor Lion Lion Seal Seal Used 10.0% 70.0% **Total Number Harvested** 2.2 8.8 Hunted 20.0% 30.0% **Total Number Struck and Lost** 0.0 0.0 Harvested 10.0% 30.0% Total Number Taken 2.2 8.8

Received 0.0% 50.0% Gave Away 10.0% 30.0%

Number Harvested Per Capita N/A N/A

	I HARVE								_				Unknown	
	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aua	Sep	Oct	Nov	Dec	Month	Tota
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HOUS	SEHOLDS	(UNEXP	anded)							
Harvest	0	0	0	0	0	0	2	0	0	0	0	0	0	
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Take	0	0	0	0	0	0	2	0	0	0	0	cl	0	
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY ((EXPAN	DED)	•	•					
Harvest	0.0	0 0	0.0	00	0 0	0 0	22	0 0	0.0	0 0	ob	00	00	2
Struck & Lost	0.0	0 0	0 0	00	00	0 0	0 0	0 0	0 0	0.0	00	0.0	0.0	(
Total Take	0 0	0 0	0 0	00	00	0 0	22	0 0	0 0	0.0	00	0.0	0.0	2
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNI	ГҮ (ЕХР	ANDED)				
Harvest	0.0	0.0	0.0	0.0	00	0 0	2.2	0.0	0.0	0.0	0.0	0.0		2
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		(
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	2.2	0.0	0.0	0.0	0.0	0.0		2
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	00%	1000%	00%	0.0%	0.0%	0.0%	0.0%		100.0
Cum Take	0.0	0.0	0.0	0 0	0 0	0 0	2.2	2.2	2.2	2.2	2.2	2.2		
Cum. Take (%)	0.0%	00%	0.0%	00%	00%	00%	1000%	1000%	100.0%	100.0%	100.0%	100.0%		
						00%	1000%	1000%	100.0%	100.0%	100.0%		Habaana	
						00% Jun	1000% ²	1000% Aug	100.0% Sep	100.0% Oct	100.0% Nov		Unknown M o n t h	To
HARBOR	SEAL H	IARVI Feb	EST BY Mar	MON'	TH May	Jun	Jul	Aug	Sep					To
HARBOR REPORTED	SEAL H	IARVI Feb	EST BY Mar	MON'	TH May	Jun	Jul	Aug	Sep					То
HARBOR REPORTED Harvest	SEAL H Jan HARVEST	IARVE Feb	EST BY Mar TAKE BY	MON' Apr	TH May LED HO	Jun USEHO	Jul	Aug EXPAN	Sep DED)	Oct	Nov	Dec	Month	То
HARBOR REPORTED Harvest Struck & Lost	SEAL H Jan HARVEST 0	IARVI Feb AND 0	EST BY Mar TAKE BY	MON [*] Apr SAMPI	TH May _ED HO 0	Jun USEHO 2	Jul LDS (UN	Aug EXPAN 0	Sep DED)	Oct 2	Nov 2	Dec 0	Month 0	То
HARBOR REPORTED Harvest Struck & Lost Total Take	SEAL H Jan HARVEST 0 0	IARVI Feb AND 0 0	EST BY Mar TAKE BY 0 0	MON' Apr SAMPI 0 0	TH May LED HO 0 0	Jun USEHO 2 0 2	Jul LDS (UN 1 0	Aug EXPAN 0 0	Sep DED) 1	Oct 2 0	Nov 2 0	Dec 0 0	0 0	То
HARBOR REPORTED Harvest Struck & Lost Total Take ESTIMATED	SEAL H Jan HARVEST 0 0	ARVE Feb AND 0 0 0	EST BY Mar TAKE BY 0 0 0 TAKE BY	MON' Apr SAMPI 0 0	TH May LED HO 0	Jun USEHO 2 0 2 (EXPAN	Jul LDS (UN 1 0	Aug EXPAN 0 0	Sep DED) 1	Oct 2 0 2	Nov 2 0	Dec 0 0	0 0 0	
Cum. Take (%) HARBOR REPORTED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	SEAL H Jan HARVEST 0 0 0 HARVEST	IARVI Feb AND 0 0	EST BY Mar TAKE BY 0 0	MON Apr SAMPI 0 0 0 COMM	TH May LED HO 0 0 0	Jun USEHO 2 0 2	Jul LDS (UN 1 0 1	Aug EXPAN 0 0	Sep DED) 1 0	Oct 2 0	Nov 2 0 2	Dec 0 0	0 0	То

SOURCE las lasks Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Kodiak Tribal Council and Kodak Ares Natile Association, 1995.

2.2

00

22

0.0% 250% 125%

250%

2.2

11

00

11

3.3

37.5% 37 5%

00

0.0

0.0

3.3

2.2

0.0

2.2

75.0% 100.0%

2.2

0.0

2.2

11

0.0

1.1

50.0%

0.0% 12.5% 25.0% 25.0%

0.0

0.0

0.0

0.0%

8.8

100.0%

8.8

0.0

8.8

100.0%

ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)

00

00

00

00

0.0%

00

00

0 0

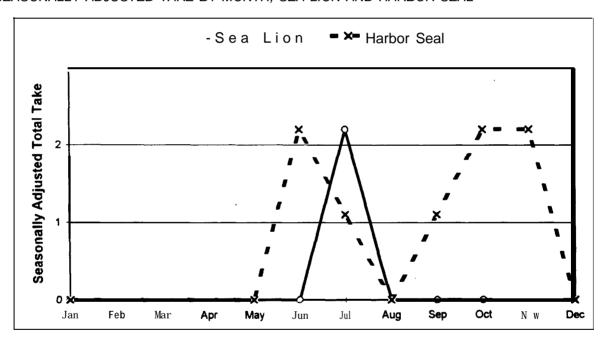
0.0%

0.0%

0.0

		Sea	Lion			Harbo	r Seal		
	Report	ed by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.	
	Sam	ple	(Expar	nded)	Sam	ple	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0	0.0%	0.0	0.0%	1	12.5%	1.1	12.5%	
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Juvenile Female	0	0.0%	0.0	0.0%	1	12.5%	1.1	12.5%	
Juvenile Unknown Sex	2	100.0%	2.2	100.0%	6	75.0%	6.6	75.0%	
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%	
Total	2	100.0%	22	1000%		100.0%	8.8	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBOR SEAL			
		Struck/	Total				Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	Year	Harv	est	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	2 36.	9	0.0	36.9
1993	0.0	12.7	12.7	199	3 6.0	0	1.0	7.0
1994	1.1	0.0	1.1	199	4 7.	6	0.0	7.6
1995	2.2	0.0	2.2	199	5 8.	8	0.0	8.8

SOURCE. Alaska Department of Fish and Game, **Division** of Subsistence, **Subsistence** Study and **Monitor** System for Sea Lions and Harbor Seals in Alaska, with assistance from the **Kodiak** Tribal **Council** and Kodak **Area Native Association**, 1995

CENSUS Total Native Households 37

Surveyed Households 37
Sampling Fraction 100.0%
Sample Household Members 92

Estimated Household Members 92.0

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	Seal
Used 2.7%	45.9%	Total Number Harvested	2.0	11.0
Hunted 2.7%	10.8%	Total Number Struck and Lost	1.0	0.0
Harvested 2.7%	10.8%	Total Number Taken	3.0	11.0
Received 0.0%	35.1%			
Gave Away 2.7%	21.6%	Number Harvested Per Capita	0.02	0.12

SEA LION	HARVE	STB	Y MON	TH									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPLE	D HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	•0	2	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Take	0	0	0	0	0	0	0	0	0	0	0	3	0	3
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPAND	ED)							
Harvest	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	2.0	0.0	2.0
Struck & Lost	0.0	0 0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0 0	1.0
Total Take	0.0	0.0	0 0	00	0 0	0.0	00	0 0	0.0	0.0	0.0	3 0	0.0	3.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AND	TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	0 0	0.0	0.0	00	00	0.0	0.0	0.0	00	0.0	0 0	2.0		2.0
Struck & Lost	0 0	0.0	0.0	0 0	00	00	0.0	0 0	0 0	0.0	0.0	1.0		10
Total Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0		3.0
Total Take (%)	0.0%	0.0%	00%	00%	00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		100.0%
Cum Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	3.0		
Cum Take (%)	0.0%	0.0%	0.0%	00%	00%	0.0%	0.0%	00%	00%	0.0%	0.0%	100.0%		

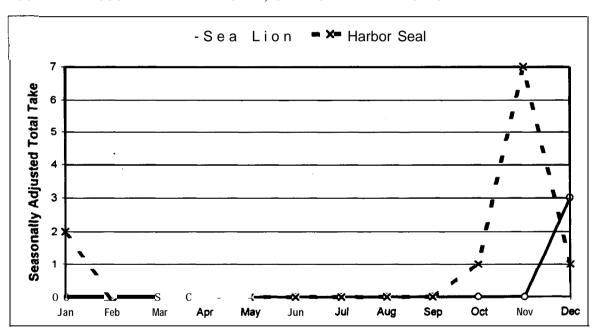
HARBOR	SEAL F	IARV	EST BY	MONT	ГН							U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	ED HOU	SEHOL	DS (UNI	EXPAND	ED)					
,larves t	2	0	0	0	0	0	0	0	0	1	7	1	0	11
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	2	0	0	0	0	0	0	0	0	1	7	1	0	11
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY (E	XPAND	ED)							
Harvest	2.0	0.0	0.0	0 0	0 0	00	0 0	0.0	0.0	1.0	7.0	1.0	0.0	11.0
Struck & Lost	0 0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	2.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	1.0	7.0	1.0	0.0	11.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Y (EXP	ANDED)				
Harvest	20	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	1.0	7.0	1.0		110
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	7.0	1.0		11.0
Total Take (%)	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	63.6%	9.1%		100.0%
Cum. Take	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	10.0	11.0		
Cum. Take (%)	18.2%	18.2%	18.2%	18.2%	18.2%	18.2%	18.2%	18.2%	18.2%	27.3%	90.9%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Larsen Bay and Larsen Bay Tribal Council, 1995.

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	r Seal	
	Reporte	ed by	Communi	ty Est.	Report	ed by	Commun	ity Est.
	Sam	p le	(Expan	ded)	Sam	ple	(Expar	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	50.0%	1.0	50.0%	10	90.9%	10.0	90.9%
Adult Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	1	50.0%	1.0	50. 0%	1	9.1%	1.0	9.1%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	2	1000%	2.0	100.0%	11	100.0%	11.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

		SEA	LION		!	HARBO	R SEA	L
•			Struck/	Total			Struck/	Total
	Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
	1992	1.1	0.0	1.1	1992	6.5	0.0	6.5
	1993	0.0	0.0	0.0	1993	7.7	5.5	13.2
	1994	2.2	0.0	2.2	1994	13.4	2.2	15.7
	1995	2.0	1.0	3. 0	1995	11.0	0.0	11.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Abska. with assistance from the City of Larsen Bay and Larsen Bay Tribal Council, 1995.

Table 31. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Old Harbor, 1995

SAMPLING DESIG	V:	Active	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	29	59	88	
	Surveyed Households	24	28	52	
	Sampling Fraction	82.8%	47.5%	59.1%	
	Sample Household Members	` 90	87	177	
E	stimated Household Members	108.8	183.3	292.1	

HARVEST AND USE INFORMATION

Percentage of Native Households:	Estimated Community Harvest
Sea Harbor	and Take (Expanded): Sea Harbor
<u>Lion</u> <u>Seal</u>	<u>Lion</u> <u>Seal</u>
Used 97.6% 100.0%	Total Number Harvested 107.1 112.0
Hunted 48.3% 48.3%	Total Number Struck and Lost 5.7 2.4
Harvested 47.0% 44.6%	Total Number Taken 112.9 114.4
Received 90.7% 84.2%	
Gave Away 44.6% 41.0%	Number Harvested Per Capita 0.37 0.38

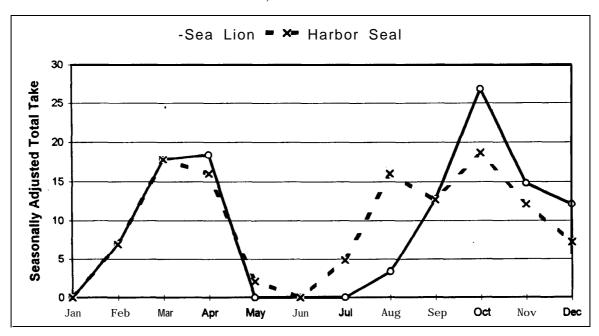
SEA LION	I HARVE	ST B	Y MON	TH									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jui	Au9	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	4	14	11	0	0	0	2	8	20	10	10	0	79
Struck & Lost	0	1	0	2	0	0	0	0′	1	0	0	0	0	. 4
Total Take	0	5	14	13	0	0	0	2	9	20	10	10	. 0	83
ESTIMATED	HARVEST	AND	TAKE BY	COMM	JNITY (I	EXPAND	DED)							
Harvest	0.0	5.7	178	151	0 0	00	00′	33	115	269	14.6	12.1	0.0	107.1
Struck & Lost	0.0	1 2	0.0	33	0 0	00	00	0 0	12	0 0	0 0	0 0	0.0	5 7
Total Take	0.0	6.9	178	164	0 0	0 0	0 0	33	127	269	14.8	12.1	0.0	1129
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	0.0	5.7	17.0	151	0 0	00	00	33	115	269	14.8	12.1		1071
Struck & Lost	0.0	1.2	0.0	33	0 0	00	00	0 0	1.2	0 0	0.0	0 0		5.7
Total Take	0.0	6.9	17.8	18.4	0.0	00	00	33	127	26.9	14.8	12.1		112.9
Total Take (%)	0.0%	6.1%	15.8%	16.3%	00%	00%	00%	29%	112%	236%	131%	10.7%		100.0%
Cum. Take	0.0	6.9	240	432	432	43.2	432	465	591	a60	1006	112.9		
Cum. Take (%)	0 0%	6.1%	21.9%	362%	362%	362%	362%	412%	524%	762%	893%	100.0%		

HARBOR	SEAL H	IARVE	ST BY	′ MON	<i>ITH</i>									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9		Sap	Oct	Nw	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE B'	Y SAMI	PLED H	OUSEHOL	DS (UI	IEXPAN	DE))					
Harvest	0	5	12	11	1	0	4	11		9	14	10	6	0	83
Struck & Lost	0	0	2	0	0	0	0	0		0	0	0	0	0	2
Total Take	0	5	14	11	1	0	4	11		9	14	10	6	0	85
ESTIMATED	HARVEST	AND	TAKE BY	COM	MUNITY	(EXPANI	DED)								
Harvest	0.0	6.9	15.4	16.0	21	0 0	48	160		127	10.7	12.1	7.3	0.0	112.0
Struck & Lost	0 0	0.0	2 4	0 0	0 0	0 0	0 0	0 0		0 0	0.0	0.0	0.0	0.0	2 4
Total Take	0.0	6.9	17.8	16.0	21	0 0	48	160		127	10.7	12 1	7.3	0.0	114.4
ESTIMATED	SEASONA	LLY A	DJUSTEI) HAR	/EST AI	ND TAKE	ву СС	MMUN	ITY	(EXP	ANDED)				
Harvest	0.0	6.9	154	160	21	0 0	48	160		127	la7	121	7 3		112.0
Struck & Lost	0.0	0.0	2.4	0.0	0.0	0.0	0 0	0 0		0 0	0 0	0.0	0.0		2.4
Total Take	0.0	6.9	17.0	16.0	21	0 0	48	160		127	107	12 1	7.3		114.4
Total Take (%)	0.0%	6.1%	15.6%	14.0%	1.6%	0.0%	42%	140%	11	1%	16.4%	10.6%	6.3%		100.0%
Cum. Take	0.0	6.9	24.8	40.7	42.9	'42.9	477	637		76 3	95.1	1071	1144		
Cum. Take (%)		6.1%	21.6%	356%	37.5%	375% 41		557%	66	7%	63.1%	937%	100.0%		

SOURCE: Alaska Department of Fish and Came, Dilision of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Old Harbor and Old Harbor Tribal Council, 1995

	· ·	Sea	Lion			Harbo	r Seal	
	Reporte	ed by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Sam	ple	(Expan	ded)	Sam	p le	(Expai	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	5	6.3%	6.0	5.6%	16	19.3%	20.2	16.1%
Adult Female	13	16.5%	17. 5	16.3%	24	20.9%	32.6	29.1%
Adult Unknown Sex	4	5.1%	5. 7	5.4%	4	4.0%	6.6	5.9%
Juvenile Male	35	44.3%	46.6	45.3%	20	24.1%	26.9	24.0%
Juvenile Female	21	26.6%	20.1	26.2%	19	22.9%	257	22.9%
Juvenile Unknown Sex	1	1.3%	1.2	1.1%	0	0.0%	0.0	0.0%
Pup Male	0	00%	0.0	00%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	79	100.0%	107.1	1000%	83	100.0%	112.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEAL	LION			HARBO	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	32.9	13.2	46.1	1992	66.6	5.3	92.1
1993	32.1	1.0	33.2	1993	67.6	2.7	70.3
1994	46.2	1.3	47.5	1994	83.7	1.3	85.0
1995	107.1	5.7	112.9	1995	112.0	2.4	114.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of Old Harbor and Old Harbor Tribal Council, 1995.

Estimated Household Members

SAMPLING DESIGN:

CENSUS Total Native Households 53

Surveyed Households 51
Sampling Fraction 96.2%
Sample Household Members 156

162.1

HARVESTAND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

and Take (Expanded): Sea Harbor Sea Harbor <u>Lion</u> Seal <u>Lion</u> Seal Total Number Harvested 15.6 used 21.6% 451% 56.1 Hunted 15.7% 294% Total Number Struck and Lost 0.0 0.0 Total Number Taken 15.6 Harvested 15.7% 29.4% 56.1 Received 9.8% 27.5% Number Harvested Per Capita 0.10 Gave Away 15.7% 255% 0.35

SEA LION	I HARVE	ST B	Y MON	TH								U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	/lonth	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPL	ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	1	1	0	1	0	0	2	4	3	3	0	0	15
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	1	1	0	1	0	0	2	4	3	3	0	0	15
ESTIMATED	HARVEST	AND 1	TAKE BY	COMM	IUNITY (EXPAND	DED)							
Harvest	0.0	1.0	1.0	0.0	1 0	0.0	0 0	21	42	31	31	0.0	0 0	15.6
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	00
Total Take	0.0	1.0	1.0	0.0	1.0	0 0	00	2.1	4.2	31	31	0.0	0.0	15.6
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	BY CO	MMUNIT	ТҮ (ЕХР	ANDED)				
Harvest	0.0	1.0	1.0	0.0	10	0.0	0 0	21	4.2	3.1	3.1	0.0		15.6
Struck a Lost	0.0	0.0	0.0	0.0	0.0	00	00	0.0	0.0	00	0.0	0.0		0.0
Total Take	0.0	1.0	1.0	0.0	1.0	0.0	0 0	2 1	4.2	3.1	3 1	0.0		15.6
Total Take (%)	0.0%	6.7%	6.7%	0.0%	6.7%	00%	0.0%	133%	26.7%	20.0%	20.0%	0.0%		100.0%
Cum Take	0.0	1.0	21	21	31	3.1	31	5.2	9 4	12.5	15.6	15.6		
Cum Take (%)	0.0%	6.7%	13.3%	13.3%	20.0%	20.0%	20.0%	333%	600%	80.0%	100.0%	100.0%		

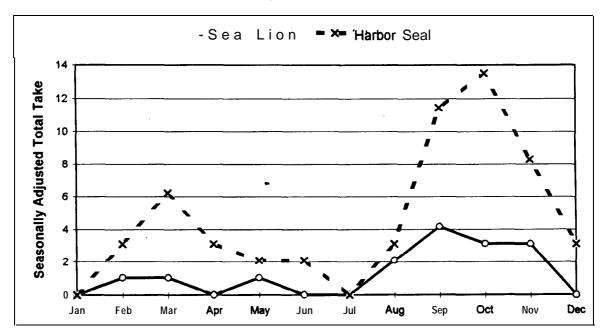
HARBOR	SEAL H	ARVE	ST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPI	LED HOU	SEHOL	DS (UN	EXPAND	ED)					
Harvest	0	3	6	3	2	2	0	3	11	13	8	3	0	54
Struck a Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	3	6	3	2	2	0	3	11	13	8	3	0	54
ESTIMATED	HARVEST	AND .	TAKE BY	COMN	IUNITY (I	EXPAND	DED)							
Harvest	0.0	3 1	6.2	3 1	21	2.1	00	31	11.4	13.5	0.3	3.1	0 0	56.1
Struck a Lost	0.0	0.0	0.0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	3.1	6.2	3.1	2.1	21	0.0	31	11.4	13.5	8.3	31	0.0	56.1
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AND	TAKE	ву со	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	31	6.2	3 1	2 1	2.1	0 0	31	114	13.5	8.3	31		561
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	00	0.0	0.0	0.0	0 0	0.0		0.0
Total Take	0.0	31	6.2	3.1	2.1	2.1	00	3.1	114	13.5	8.3	3.1		561
Total Take (%)	0.0%	5.6%	11.1%	5.6%	3.7%	3.7%	0.0%	5.6%	26.4%	24.1%	14.6%	5.6%		100.0%
Cum. Take	0.0	3.1	9.4	12.5	14.5	16.6	166	19.7	31.2	447	53.0	56.1		
Cum Take (%)	0.0%	5.6%	16.7%	22.2%	25.9%	29.6%	29.6%	35.2%	55.6%	79.6%	94.4%	100.6%		

SOURCE Abska Department of Fsh and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ouzinkie Native Corporation, City of Ouzinkie, and Ouzinkie Tribal Council, 1995

HARVEST BY AGE AND SEX

		Sea	Lion			Harboi	rSeal	
	Reporte	ed by	Commun	ity Est	Reporte	d by	Communi	ty Est.
	Samı	ole	(Expan	ded)	Samp	ole	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	0.0%	0.0	0.0%	3	5.6%	3.1	5.6%
Adult Female	1	6.7%	1.0	6.7%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	12	60.0%	12.5	60.0%	38	70.4%	39.5	70.4%
Juvenile Female	2	133%	2.1	13.3%	12	22.2%	12.5	22.2%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	1	1.9%	1.0	1.9%
Pup Male	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	00%	0.0	00%	0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	15	100.0%	15.6	100.0%	5 4	100.0%	56.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION			<u>HARBO</u>	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	3.4	0.0	3.4	1992	21.8	1.1	23.0
1993	5.4	2.2	7.6	1993	41.2	8.7	49.8
1994	4.4	2.9	7.3	1994	33.4	0.0	33.4
1995	15.6	0.0	15.6	1995	56.1	0.0	56.1

SOURCE: Alaska Department of Fish and Game, Division of Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Ouzinkie Native Corporation, City of Ouzinkie, and Ouzinkie Tribal Council, 1995

SAMPLING DE	SIGN:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	7	41	48	
	Surveyed Households	7	33	40	
	Sampling Fraction	100.0%	80.5%	83.3%	
	Sample Household Members	29	95	124	
	Estimated Household Members	29.0	118.0	147.0	

HARVEST	ANID	LICE	$INIF \cap D$	MATIONI
DARVESI	ΔMI	11.5	INFUR	N/14 I IC 11NI

Percentage of Native Househo	olds:	Estimated Community Harvest		
S e a	Harbor	and Take (Expanded):	S e a	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
used 0.0%	8.3%	Total Number Harvested	0.0	2.0
Hunted 0.0%	4.2%	Total Number Struck and Lost	0.0	0.0
Harvested 0.0%	4.2%	Total Number Taken	0.0	2.0
Received 0.0%	4.2%			
Gave Away 0.0%	4.2%	Number Harvested Per Capita	0.00	0.01

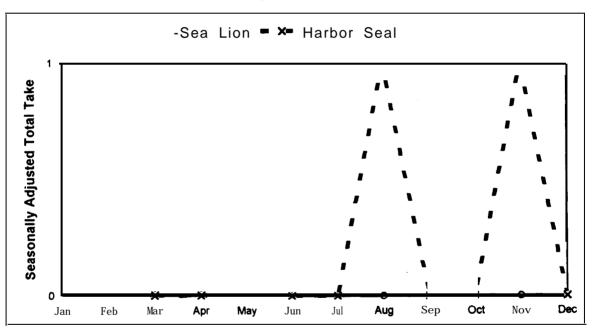
SEA LION HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	ТОМ
REPORTED HA	RVEST AND	TAKE B	Y SAMPLI	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMMI	JNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	00	00	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	00	0.0	0 0	0 0	0.0	00	0.0	0.0	0.0
Total Take	00	0.0	0.0	0 0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0 0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	00	0.0	0.0	00	00	0 0	0 0	0.0	00	00	0 0		00
Struck & Lost	00	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0 0	0 0	00	0.0	0.0		0.0
Total Take (%)			•									_		
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0		
Cum Take (%)	_		_	***		***			•••	***	***			

HARBOR	SEAL H	ARV	EST BY	MON	TH								Unknown	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total													
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOI	LDS (U	NEXPAN	DED)																		
Harvest	0	0	0	0	0	0	0	1	0	0	1	0	0	2													
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
Total Take	0	0	0	0	0	0	0	1	0	0	1	0	0	2													
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY ((EXPAN	DED)																				
Harvest	0.0	0.0	0.0	0.0	0.0	0 0	0 0	1.0	0.0	0.0	1.0	0.0	0.0	20													
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0													
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	1.0	0 0	0.0	1.0	0.0	0.0	2.0													
ESTIMATED	SEASONA	LLY A	ADJUSTED	HARV	EST ANI	TAKE	BY C	OMMUNI	TY (EXI	PANDED)																	
Harvest	0.0	0.0	0.0	0.0	0 0	0 0	0 0	10	0 0	0.0	10	0 0		2 0													
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0		0.0													
Total Take	0.0	0 0	0.0	0.0	0.0	0.0	0 0	1.0	0.0	0.0	1.0	0.0		2.0													
Total Take (%)	0 0%	0.0%	0.0%	0.0%	0.0%	0.0%	00%	50.0%	0.0%	0.0%	50.0%	0.0%		100.0%													
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0 0	1.0	1.0	10	2.0	2.0															
Cum Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	1000%	100.0%															

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Lions Tribal Council and City of Port Lions, 1995

		Sea	Lion		Harbor Seal						
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Communi	ty Est.			
	Samp	le	(Expan	ded)	Sam	ple	(Expan	ded)			
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0		0.0		1	50.0%	1.0	50.0%			
Adult Female	0		0.0		0	0.0%	0.0	0.0%			
Adult Unknown Sex	0		0.0	***	0	0.0%	0.0	0.0%			
Juvenile Male	0		0 0	miles.	0	0.0%	0.0	0.0%			
Juvenile Female	0		0.0	_	0	0.0%	0.0	0.0%			
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%			
Pup Male	0		0.0	•••	0	0.0%	0.0	0.0%			
Pup Female	0	•••	0.0		0	0.0%	0.0	0.0%			
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%			
Male Unknown Age	0		0.0	***	1	50.0%	1.0	50.0%			
Female Unknown Age	0	•••	0.0		0	0.0%	0.0	0.0%			
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%			
Total	0		0.0	_	2	100.0%	2. 0	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	L
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	1.1	2. 2	3. 3	1992	36.9	2. 2	39. 1
1993	4. 0	1.0	5. 0	1993	26.0	1.0	27. 0
1994	0.0	0.0	0.0	1994	8. 0	0.0	8. 0
1995	0.0	0.0	0.0	1995	2.0	0.0	2. 0

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Port Lions Tribal Council and City of Port Lions, 1995.

CENSUS Total Native Households 25

Surveyed Households 20
Sampling Fraction 60.0%

Sample Household Members 50
Estimated Household Members 62.5

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	Seal		Lion	<u>Seal</u>
used 0.0%	0.0%	Total Number Harvested	0.0	0.0
Hunted 0.0%	0.0%	Total Number Struck and Lost	0.0	0.0
Harvested 0.0%	0.0%	Total Number Taken	0.0	0.0
Received 0.0%	0.0%			
Gave Away	0.0% 0.0%	Number Harvested Per Capita	0.00	0.00

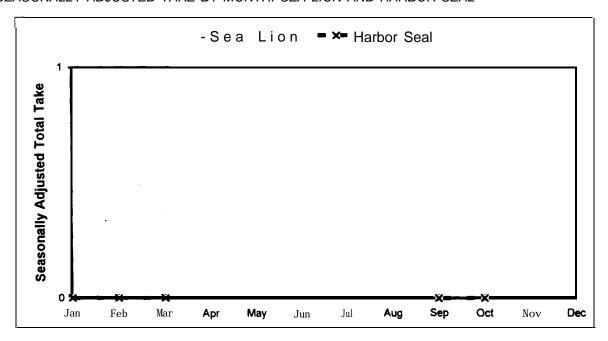
SEA LION HARVEST BY MONTH Unknwm														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	Nonth	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS (UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND 1	TAKE BY	COMM	UNITY (E	XPAND	DED)	•						
Harvest	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0
Struck & Lost	0.0	0.0	0 0	00	0 0	0 0	00	0 0	0 0	0.0	0 0	0 0	0.0	0.0
Total Take	0.0	0.0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	JUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0 0	0 0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0 0	0.0		0.0
Struck & Lost	0.0	0.0	0 0	00	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0 0		0.0
Total Take	0.0	'0.0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)			***	•••			_	***	-		•			 .
Cum Take	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum, Take (%)		***	-			-		-	***			***		

HARBOR SEAL HARVEST BY MONTH Unknown														
HARBUR	SEAL F	Feb	Mar	Apr Apr	П Мау	Jun	Jul	Aug	Sep	Oct	Nw		Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	FD HOU	SEHOL	DS (UN)) 					
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY (E	XPANE	DED)							
Harvest	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0 0
Struck & Lost	0.0	0.0	0 0	00	0 0	0 0	0 0	0.0	0 0	0.0	00	0.0	0.0	0.0
Total Take	0.0	0.0	0 0	0 0	0 0	00	0 0	0.0	0 0	0.0	00	0.0	0.0	0.0
ESTIMATED	SEASONA	ALLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	OMMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	00	0 0	0 0	00	0.0	0.0	00	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take(%)			-	***	•••							•==		
Cum. Take	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. T	ake(%)		•••						****		***			

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Bay Traditional Village Council, 1995.

		Sea	Lion			Harbo	r Seal	
	Reporte	d by	Commun	ity Est.	Reporte	d by	Communi	ty Est.
	Samp	ole	(Expanded	}	Samp	le	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		0		0.0	***
Adult Female	0	***	0 0	_	0		0.0	•••
Adult Unknown Sex	0		00	_	0		0.0	
Juvenile Male	0	-	0.0		0		0.0	_
Juvenile Female	0	•••	0.0		0		0.0	
Juvenile Unknown Sex	0		0.0		0	***	0.0	
Pup Male	0		0.0		0		0.0	
Pup Female	0		00		0		0.0	
Pup Unknown Sex	0		00		0		0.0	
Male Unknown Age	0		00		0		0.0	
Female Unknown Age	0	-	00		0		0.0	_
Unknown Sex and Age	, 0		0 0		0		0.0	
Total	0		0 0	***	0	- .	0.0	

SEASONALLY ADJUSTED TAKE BY MONTH. SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u></u>	HARBO	R SEA	<u>\L</u>
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	2. 4	1.2	3.6
1993	0.0	0.0	0.0	1993	6. 3	5. 0	11. 3
1994	0.0	0.0	0.0	1994	3. 4	0.0	3. 4
1995	0.0	0.0	0.0	1995	0.0	0.0	0. 0

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Chignik Bay Traditional Village Council, 1995

CENSUS Total Native Households 21

Surveyed Households 20 Sampling Fraction 95.2%

Sample Household Members 71
Estimated Household Members 74.6

HARVESTAND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

Sea H	Harbor	and Take (Expanded):	Sea l	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
used 0.0%	0.0%	Total Number Harvested	0.0	0.0
Hunted 0.0%	0.0%	Total Number Struck and Lost	0.0	0.0
Hat-vested 0.0%	0.0%	Total Number Taken	0.0	0.0
Received 0.0%	0.0%			
Gave Away 0.0%	0.0%	Number Harvested Per Capita	0.00	0.00

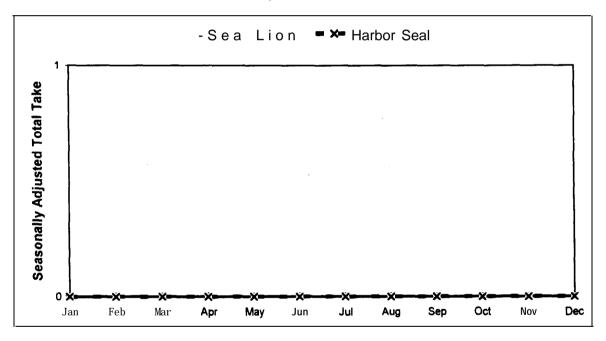
SEA LION	I HARVE	ST B	Y MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0.0	0 0	00	0 0	0 0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0.0
Struck & Lost	0.0	0 0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	00	0 0	00	0.0	0 0	0.0	00	0.0	0 0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	00	0 0	00	0.0	0 0	0 0	0 0	0 0		0.0
Struck & Lost	0.0	0.0	0 0	00	00	0 0	0.0	0.0	0 0	0 0	0.0	0 0		0.0
Total Take	0.0	0.0	0.0	00	0 0	0.0	00	00	00	0.0	0.0	0.0		0.0
Total Take (%)	***	***					•••							
Cum Take	0.0	0 0	0.0	0.0	0.0	00	0.0	00	00	00	0.0	0.0		
Cum Take (%)	***		***	_		***	•••			P4=				

IHARBOR	SEAL H			MONT	ГН								nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	/lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	ED HOU	SEHOL	DS (UNE	XPANDE	ED)					
⊣arvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY (E	XPAND	ED)							
Harvest	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	00	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0 0	0.0	0.0	0 0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	00	0 0	0.0		0 0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)				•				400			-	****		
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)		•••		***				ena Objekte anad						

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaski with assistance from the Chgnik Lagoon Traditional Village Council, 1995.

	-	Sea	Lion			Harbo	r Seal	
	Reporte Samp	•	Community (Expand	•	Reporte Samp	•	Communi (Expan	•
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	•••	0		0.0	
Adult Female	0		0.0		0	•••	0.0	•••
Adult Unknown Sex	0	•••	0.0		0		0.0	
Juvenile Male	0	***	0.0		0	•••	0.0	
Juvenile Female	0		0.0	***	0		0.0	
Juvenile Unknown Sex	0		0.0		0		0.0	
Pup Male	0		0.0		0		0.0	
Pup Female	0		0.0		0		0.0	
Pup Unknown Sex	0		0.0		0		0.0	
Male Unknown Age	0		0.0		0		0.0	
Female Unknown Age	0		00		0		0.0	-
Unknown Sex and Age	0		00		0	-	0.0	
Total	0		0.0	***	0		0.0	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION			HARBO	R SEA	<u>L</u>
		Struck/	Total	·		Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	4. 0	0.0	4. 0
1993	1.1	0.0	1. 1	1993	4.3	1.1	5. 3
1994	0.0	0.0	0.0	1994	0.0	1.0	1.0
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0

SOURCE Al aska Department of Fish and Game, Division of Subsalence. Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Chignik Lagoon Traditional Village Council, 1995.

CENSUS Total Native Households 33
Surveyed Households 31
Sampling Fraction 93.9%

Sample Household Members 128 Estimated Household Members 136.3

HARVESTAND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

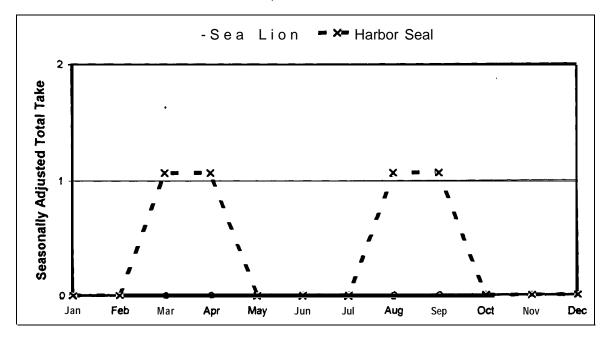
Sea Harbor and Take (Expanded): Sea Harbor Lion Seal <u>Lion</u> Seal **Used** 6.5% 74.2% **Total Number Harvested** 0.0 3.2 Hunted 0.0% **Total Number Struck and Lost** 0.0 12.9% 1.1 Harvested 0.0% Total Number Taken 0.0 6.5% 4.3 Received 6.5% 742% Gave Away 0.0% Number Harvested Per Capita 0.00 51.6% 0.02

SEA LION	HARVE	ST BY	/ MON	TH								Į	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Total
REPORTED HAR	RVEST AND	TAKE E	BY SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
farvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0′	0	0	0	0	0	. 0
otal Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED I	HARVEST	AND T	AKE BY	COMMU	JNITY (EXPAND	ED)							
larvest	0.0	0.0	0 0	0 0	00	0 0	00′	00	0 0	0 0	00	00	00	0.0
Struck & Lost	0.0	0 0	0 0	0 0	00	0 0	00	00	0 0	0 0	00	0.0	0.0	00
olal Take	0.0	00	0 0	0.0	00	0 0	00	00	0 0	0 0	0.0	0.0	00	00
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST ANI	TAKE	ву сог	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	0 0	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	00	0.0		0.0
Struck & Lost	0.0	0.0	0 0	0 0	00	0 0	00	00	0 0	0 0	00	0.0		0.0
「otal Take	0.0	0.0	0 0	0 0	0 0	0 0	00	00	0 0	0.0	0.0	00		0.0
「otal Take(%)							_	•		-				
Cum Take	0.0	0.0	0.0	0 0	0 0	0 0	00	00	0 0	0.0	00	0.0		
Cum Take (%)							•••							
LADDOD	CEAL LI	4 D) / C	CT DV	MONT	-1.1								0	
HARBOR S			ST BY Mar	MONT Apr		Jun	Jul	Aua	Seo	Ckt	Nov		Unknown Month	Total
	Jan	Feb	Mar	Apr	Mav	Jun USEHOL	Jul DS (UN	Aua EXPANI	Sep	Ckt	Nov		Unknown M o n t h	Total
HARBOR S	Jan	Feb	Mar	Apr	Mav	USEHOL					Nov 0		Month	
REPORTED H	Jan IARVEST	Feb AND T	Mar AKE BY	Apr SAMPL	Mav ED HO		DS (UN	EXPAND		Ckt 0 0	-	Dec	Month 0	Total 3
REPORTED H	Jan IARVEST 0	Feb AND T 0	Mar AKE BY 1	Apr SAMPL 0	Mav ED HO 0	USEHOL 0	DS (UN 0	EXPAND	DED)	0	0	Dec 0	Month	3
REPORTED H Harvest Struck & Lost Total Take	Jan IARVEST 0 0 0	Feb AND T 0 0 0	Mar AKE BY 1 0	ADr SAMPL 0 1	Mav ED HO 0 0	USEHOL 0 0 0	DS (UN 0 0 0	EXPAND 1 0	DED)	0	0 0	0 0	0 0	3
REPORTED H	Jan IARVEST 0 0 0	Feb AND T 0 0 0	Mar AKE BY 1 0	ADr SAMPL 0 1	Mav ED HO 0 0	USEHOL 0 0 0 0 (EXPAND	DS (UN 0 0 0	EXPAND 1 0	DED)	0	0 0	0 0 0	0 0 0	3 1 4
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest	Jan HARVEST 0 0 0 HARVEST	Feb AND T 0 0 0 AND T 0 0 AND T	Mar AKE BY 0 1 AKE BY 11	ADF SAMPL 0 1 1 COMMU	Mav ED HO 0 0 0 UNITY 00	USEHOL 0 0 0 (EXPAND	0 0 0 0 0 0 0 0 0	EXPAND 1 0 1	DED) 1 0 1	0 0 0	0 0 0	0 0 0	0 0 0	3 1 4 3.2
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost	Jan IARVEST 0 0 0 HARVEST 0.0	Feb To The The To The The To The The The To The	Mar AKE BY 1 0 1 AKE BY 11 00	ADr SAMPL 0 1 1 COMMU 00 11	Mav ED HO 0 0 0 JNITY 00 00	USEHOL 0 0 0 (EXPANE 00	DS (UN 0 0 0 ED) 00	1 0 1 1 11 00	DED) 1 0 1 1.1 0.0	0 0 0	0 0 0	0 0 0	0 0 0 0	3 1 4 3.2 1.1
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost Total Take	Jan HARVEST 0 0 0 HARVEST 0.0 0.0	Feb / AND T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Mar AKE BY 1 0 1 AKE BY 1 0 1 1 1 1 1 1 1 1 1 1 1	ADF SAMPL 0 1 1 COMMU 00 11 11	Mav ED HO 0 0 0 JNITY 0 0 0 0	USEHOL 0 0 0 (EXPANE 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 11 0 0 11	DED) 1 0 1 1.1 0.0 11	0 0 0 0.0 0.0 0.0	0 0 0	0 0 0 0	0 0 0	3 1 4 3.2
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost	Jan HARVEST 0 0 0 HARVEST 0.0 0.0	Feb / AND T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Mar AKE BY 1 0 1 AKE BY 1 0 1 1 1 1 1 1 1 1 1 1 1	ADF SAMPL 0 1 1 COMMU 00 11 11	Mav ED HO 0 0 0 JNITY 0 0 0 0	USEHOL 0 0 0 (EXPANE 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 1 11 00	DED) 1 0 1 1.1 0.0 11	0 0 0	0 0 0	0 0 0 0	0 0 0 0	3.2 1.1 4.3
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost Total Take ESTIMATED S	Jan IARVEST 0 0 0 HARVEST 0.0 0.0 SEASONA	Feb AND T 0 0 0 AND T 0.0 0.0 0.0 LLY AE	MARE BY 1 0 1 TAKE BY 11 00 1.1 DJUSTED	ADr SAMPL 0 1 1 COMMU 00 11 11 HARVE	Mav ED HO 0 0 0 JNITY 00 00 ST AN	USEHOL 0 0 0 (EXPAND 00 00 00 D TAKE	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 1 1 1 1	DED) 1 0 1 1.1 00 11 TY (EXP	0 0 0 0.0 0.0 0.0	0 0 0 00 00 0.0	0 0 0 0 0.0 0.0	0 0 0 0	3 1 4 3.2 1.1
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost Total Take ESTIMATED S Harvest	Jan IARVEST 0 0 0 HARVEST 0.0 0.0 SEASONA	Feb To	Mar AKE BY 1 0 1 TAKE BY 11 00 1.1 DJUSTED 1.1	ADr SAMPL 0 1 1 COMMU 00 11 11 HARVE 00	Mav ED HO 0 0 0 JNITY 00 00 ST AN	0 0 0 0 (EXPAND 00 00 00 D TAKE	OS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DED) 1 0 1 1.1 0.0 11 Y (EXP	0 0 0 0.0 0.0 0.0 vANDED)	0 0 0 00 00 0.0	0 0 0 0.0 0.0 0.0	0 0 0 0	3.2 1.1 4.3 3.2
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost Total Take ESTIMATED S Harvest Struck & Lost	Jan IARVEST 0 0 0 HARVEST 0.0 0.0 SEASONA	Feb	Mar AKE BY 1 0 1 TAKE BY 11 00 1.1 0.0 1.1 0.0	ADr SAMPL 0 1 1 COMMU 00 11 11 HARVE 00 11 11	Mav ED HO 0 0 0 JNITY 00 00 ST AN 00	USEHOL 0 0 0 0 (EXPAND 00 00 00 TAKE 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 1 0 0 1 1 1 1 1 1 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0	DED) 1 0 1 1.1 00 11 TY (EXP	0 0 0.0 0.0 0.0 0.0 ANDED)	0 0 0 00 0 0 0.0	0 0 0 0.0 0.0 0.0 0.0	0 0 0 0.0 0.0 0.0	3 1 4 3.2 1.1 4.3 3.2 1.1
REPORTED H Harvest Struck & Lost Total Take ESTIMATED H Harvest Struck & Lost Total Take ESTIMATED S Harvest Struck & Lost Total Take Total Take	Jan O O O HARVEST 0.0 0.0 SEASONA 0.0 0.0	Feb	MAR BY 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADr SAMPL 0 1 1 COMMU 00 11 11 HARVE 00 11 11	Mav ED HO 0 0 0 JNITY 00 00 ST AN 00 0.0	0 0 0 0 (EXPAND 00 00 00 D TAKE 00 00	DS (UN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 11 00 11 MMUNIT 11 00	DED) 1 0 1 1.1 00 11 Y (EXF 11 00 11	0 0 0 0.0 0.0 0.0 4NDED) 0.0 0.0	0 0 0 00 0.0 0.0	0 0 0 0.0 0.0 0.0 0.0 0.0	0 0 0 0.0 0.0 0.0	3 1 4 3.2 1.1 4.3 3.2 1.1 4.3

'SOURCE: Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Chignik Lake Traditional Village Council, 1995

		Sea	Lion			Harbo	or Seal	
	Reporte	d by	Communit	y Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expand	ded)	Sam	ple	(Ехра	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0	***	0.0		2	66.7%	2.1	66.7%
Adult Female	0		0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0	•	0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		00		0	0.0%	0.0	0.0%
Juvenile Female	0	***	0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Pup Male	0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	***	00	***	1	33.3%	1.1	33.3%
Total	0		0.0		3	100.0%	3.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION		<u> </u>	HARBO	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	8.3	2.1	10.3
1993	0.0	0.0	0.0	1993	15.2	5.5	20.8
1994	0.0	0.0	0.0	1994	1 20.8	1.3	22.1
1995	0.0.	0.0	0.0	199	5 3.2	1.1	4.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Chignik Lake Traditional Village Council, 1995

CENSUS Total Native Households 20 Surveyed Households 17

Sampling Fraction 66.0%
Sample Household Members 53

Estimated Household Members 62.4

HARVEST AND USE INFORMATION

Percentage of Native Househ	olds:	Estimated Community Harvest		
Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	Seal
Used 0.0%	58.8%	Total Number Harvested	0.0	25.9
Hunted 0.0%	41.2%	Total Number Struck and Lost	0.0	1.2
Harvested 0.0%	41.2%	Total Number Taken	0.0	27.1
Received 0.0%	23.5%			
Gave Away 0.0%	41.2%	Number Harvested Per Capita	0.00	0.42

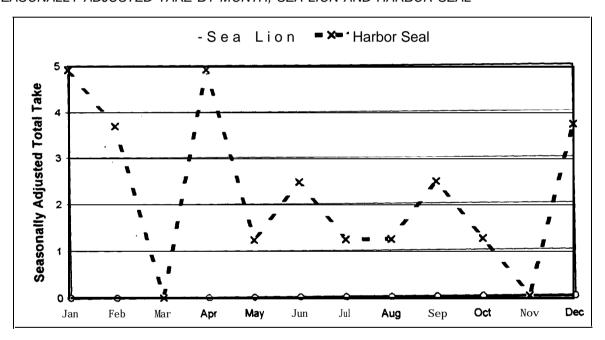
SEA LION	HARVE	ST B	Y MON	TH								ıU	ıknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	lonth	Total
REPORTED HAI	RVEST AND	TAKE	BY SAMPLE	D HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Los!	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY	(EXPAND	ED)							
Harvest	0.0	0.0	0.0	00	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	00	0 0	00	00	0.0	0.0	0.0	0.0	0.0	0 0	0.0
Total Take	0.0	0 0	0.0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST ANI	D TAKE	BY CO	MMUNITY	Y (EXPA	NDED)				
Harvest	0 0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Struck & Lost	0 0	0 0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0 0
Total Take	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		-	•••									_		
Cum Take	0.0	0.0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)				40-	-							_		

HARBOR	SEAL H	IARVE	ST BY I	MONTE	4							U	Inknown	
	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Auo	Sep	Ccl	Nw	Dec N	/l o n t h	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPLE	D HOU	SEHOLI	DS (UNE	XPANDI	ED)					
Harvest	4	3	0	4	1	2	1	1	2	1	0	3	0	22
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total Take	4	3	0	4	1	2	1	1	2	1	0	3	1	23
ESTIMATED	HARVEST	AND T	TAKE BY	сомми	NITY (E	XPAND	ED)							
Harvest	4.7	3 5	0.0	47	1.2	24	1.2	1.2	2.4	1.2	0.0	3.5	0.0	26.9
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
Total Take	47	3.5	0.0	4.7	1.2	2 4	1.2	1.2	2 4	1.2	0.0	3.5	1.2	27.1
ESTIMATED	SEASONA	LLY A	JUSTED	HARVES	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	47	35	0.0	47	1.2	24	1.2	1.2	2 4	1.2	0.0	3.5		25.9
Struck & Lost	0.2	0.2	0.0	0.2	0 1	0.1	01	01	01	01	0.0	0.2		1.2
Total Take	4.9	3.7	0.0	4.9	1.2	2.5	1.2	1.2	2.5	1.2	0.0	3.7		27.1
Total Take (%)	10.2%	13.6%	0.0% 18	. 2 %	4.5%	9 1%	4.5%	45%	9.1%	4.5%	0.0%	13.6%		100.0%
Cum. Take	4.9	8.6	8.6	13.5	14.8	17.2	18.4	19.7	22.1	234	234	27 1		
Cum Take	(%) 18.2	% 31.6	% 31.8%	50.0%	54.5%	636%	68.2%	727%	81.8%	864%	864%	100.0%		

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Ltons and Harbor Seals in Alask with assistance from the False Pass Tribal Council and City of False Pass, 1995.

		S	ea Lion			Harb	or Seal		
	Reporte	d by	Community	y Est.	Reporte	ed by	Commun	ity Est.	
	Samp	le	(Expanded)		Samp	ole	(Expanded)		
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0		0.0		10	45.5%	11.8	45.5%	
Adult Female	0		0.0		0	0.0%	0.0	0.0%	
Adult Unknown Sex	0	***	0.0		0	0.0%	0.0	0.0%	
Juvenile Male	0	•	0.0		4	18.2%	4.7	18.2%	
Juvenile Female	0		0.0		1	4.5%	1.2	4.5%	
Juvenile Unknown Sex	0		00		7	31.8%	8.2	31.8%	
Pup Male	0		0.0		0	0.0%	0.0	0.0%	
Pup Female	0		0.0		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	
Male Unknown Age	0	***	00	***	0	0.0%	0.0	0.0%	
Female Unknown Age	0		00		0	0.0%	0.0	0.0%	
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%	
Total	0		0.0		22	100.0%	25.9	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION		<u> </u>	HARBO	R SEA	L
		Struck	Total			Struck/	Total
Year	Harvest	Lost	<u>Take</u>	Year	Harvest	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	18. 0	0.0	18. 0
1993	0.0	0.0	0.0	1993	19. 0	0.0	19. 0
1994	0.0	0.0	0.0	1994	12. 8	2. 1	14. 7
1995	0.0	0.0	0.0	1995	25. 9	1. 2	27. 1

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the False Pass Tribal Council and City of False Pass, 1995

CENSUS Total Native Households 8
Surveyed Households 6

Sampling Fraction 75.0%
Sample Household Members 25
Estimated Household Members 33.3

Unknown

HARVEST AND USE INFORMATION

SEA LION HARVEST BY MONTH

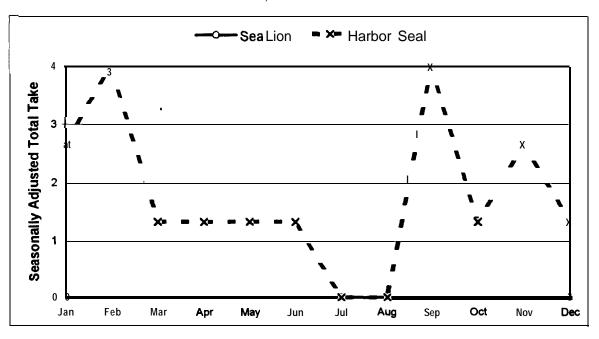
Percentage of Native Househo	olds:	Estimated Community Harvest		
Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
Used 0.0% 1	100.0%	Total Number Harvested	0.0	18.7
Hunted 0.0%	83.3%	Total Number Struck and Lost	0.0	2.1
Harvested 0.0%	83.3%	Total Number Taken	0.0	21.3
Received 0.0%	% 100.0%			
Gave Away 0.0%	667%	Number Harvested Per Capita	0.00	0.56

SEA LION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	nknown Ionth	Total
REPORTED HA	RVEST AND	TAKE I	BY SAMPLI	ED HOUS	SEHOLDS (UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPAND	ED)							
Harvest	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0 0
Struck & Lost	0.0	0 0	0 0	00	0 0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0
Total Take	0.0	0 0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	0.0	0.0	00	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0 0	00	0 0	00	0.0		0.0
Total Take	0 0	0 0	0.0	00	0.0	0.0	00	0.0	00	0.0	0.0	0.0		0.0
Total Take (%)				-	_	_	~-							
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0		
Cum Take (%)	•••	•••	•••	****		***	***		***					
HARROR	SEAL H	$I\Delta RVE$	CT RV	$M \cap M$	TH							- 11	nknown	
HARBOR	SEAL H	IARVE Feb	ST BY Mar	MON Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov		nknown ⁄lonth	Total
REPORTED	Jan	Feb	Mar	Apr	May			Aug EXPAND	-	Oct	Nov			Total
	Jan	Feb	Mar	Apr	May				-	Oct	Nov 2			Total
REPORTED	Jan HARVEST	Feb AND	Mar FAKE BY	Apr	May _ED HOU		.DS (UN	EXPAND	ED)			Dec N	<i>l</i> onth_	
REPORTED Harvest	Jan HARVEST 2	Feb AND 7	Mar FAKE BY	Apr SAMPI	May LED HOU	JSEHOL 1	.DS (UN 0	EXPAND 0)ED)	1	2	Dec 1	<u>// onth</u> 0	14
REPORTED Harvest Struck & Last	Jan HARVEST 2 0 2	Feb AND 1 2 1 3	Mar ΓΑΚΕ ΒΥ 0 1	Apr SAMPI 1 0 1	May LED HOU 1 0	JSEHOL 1	.DS (UN 0 0 0	EXPAND 0 0	DED) 3 0	1 0	2 0	1 0	0 0	14 2
REPORTED Harvest Struck & Last Total Take	Jan HARVEST 2 0 2	Feb AND 1 2 1 3	Mar ΓΑΚΕ ΒΥ 0 1	Apr SAMPI 1 0 1	May LED HOU 1 0	1 0 1	.DS (UN 0 0 0	EXPAND 0 0	DED) 3 0	1 0	2 0	1 0	0 0	14 2
REPORTED Harvest Struck & Last Total Take ESTIMATED	Jan HARVEST 2 0 2 HARVEST	Feb AND 1 2 1 3 AND	Mar FAKE BY 0 1 TAKE BY	Apr SAMPI 0 1 COMM	May LED HOU 1 0 1 UNITY (F	JSEHOL 1 0 1 EXPANI	.DS (UN 0 0 0 0 DED)	EXPAND 0 0 0	DED) 3 0 3	1 0 1	2 0 2	1 0	0 0 0	14 2 16
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest	Jan HARVEST 2 0 2 HARVEST 2.7	Feb AND 1 2 1 3 AND 2 2 7 AND 2 2 7	Mar O 1 TAKE BY 0 1 TAKE BY	Apr SAMPL 1 0 1 COMM 1.3	May LED HOU 1 0 1 UNITY (I	ISEHOL 1 0 1 EXPANI 1.3	.DS (UN 0 0 0 0 DED)	0 0 0 0	3 0 3 40	1 0 1	2 0 2 2.7	1 0 1 1.3	0 0 0 0	14 2 16
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck 8 Lost	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7	Feb AND 7 2 1 3 AND 2.7 1.3 4.0	Mar O 1 TAKE BY 0 1 TAKE BY 0.0 1.3 1.3	Apr SAMPI 0 1 COMM 1.3 0 0 13	May LED HOU 1 0 1 UNITY (II 1.3 0 0 13	1 0 1 EXPANI 1.3 0.0 13	.DS (UN 0 0 0 0 DED) 0.0 0.0	0 0 0 0 0 0.0 0.0	DED) 3 0 3 40 0.0 4.0	1 0 1 1.3 0 0	2 0 2 2.7 0.0	1 0 1 1.3 0.0	0 0 0 0 0.0	14 2 16 10.7 2.7
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck 8 Lost Total Take	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7	Feb AND 7 2 1 3 AND 2.7 1.3 4.0	Mar O 1 TAKE BY 0 1 TAKE BY 0.0 1.3 1.3	Apr SAMPI 0 1 COMM 1.3 0 0 13	May LED HOU 1 0 1 UNITY (II 1.3 0 0 13	1 0 1 EXPANI 1.3 0.0 13	.DS (UN 0 0 0 0 DED) 0.0 0.0	0 0 0 0 0 0.0 0.0	DED) 3 0 3 40 0.0 4.0	1 0 1 1.3 0 0 1.3	2 0 2 2.7 0.0	1 0 1 1.3 0.0	0 0 0 0 0.0	14 2 16 10.7 2.7
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck 8 Lost Total Take ESTIMATED	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7 SEASONA	Feb 2 1 3 3 AND 2.7 1.3 4.0 ALLY A	MAR O 1 TAKE BY 0.0 1.3 1.3 DJUSTED	Apr	May LED HOU 1 0 1 UNITY (I 1.3 00 13 EST AND	1 0 1 EXPANI 1.3 0.0 13	DED) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0.0 0.0 0.0	DED) 3 0 3 40 0.0 4.0	1 0 1 1.3 0 0 1.3 ANDED)	2 0 2 2.7 0.0 2.7	1 0 1 1.3 0.0 1.3	0 0 0 0 0.0	14 2 16 10.7 2.7 21.3
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck 8 Lost Total Take ESTIMATED Harvest	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7 SEASONA 2.7	Feb AND 7 2 1 3 AND 2.7 1.3 4.0 ALLY A 2.7	MAT O 1 TAKE BY 0.0 1.3 1.3 DJUSTED 0.0	Apr	May LED HOU 1 0 1 UNITY (I 1.3 00 13 EST AND 13	1 0 1 EXPANI 1.3 0.0 13 TAKE 1.3	DED) 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0.0 0.0 0.0 0.0	3 0 3 40 0.0 4.0 Y (EXP.	1 0 1 1.3 0 0 1.3 ANDED)	2 0 2 2.7 0.0 2.7	1 0 1 1.3 0.0 1.3 1.3	0 0 0 0 0.0	14 2 16 10.7 2.7 21.3
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7 SEASONA 2.7 0.0 2.7	Feb AND 7 2 1 3 AND 2.7 1.3 4.0 ALLY A 2.7 1.3 4.0	Mar O 1 1 TAKE BY 0.0 1.3 1.3 DJUSTED 0.0 1.3	Apr SAMPI 0 1 COMM 1.3 00 13 HARVE	May LED HOU 1 0 1 UNITY (II 1.3 0 0 1 3 EST AND 1 3 0.0	ISEHOL 1 0 1 EXPANI 1.3 0.0 13 TAKE 1.3 0.0	DED) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3 0 3 4 0 0.0 4.0 Y (EXP. 4.0 0.0 0.0	1.3 0 0 1.3 0 0 1.3 ANDED) 1.3 0.0	2 0 2 2.7 0.0 27 2.7 0.0	1 0 1 1.3 0.0 1.3 1.3 0.0 0.0	0 0 0 0 0.0	14 2 16 10.7 2.7 21.3 18.7' 2.7'
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7 SEASONA 2.7 0.0 2.7	Feb AND 7 2 1 3 AND 2.7 1.3 4.0 ALLY A 2.7 1.3 4.0	Mar O 1 TAKE BY 0.0 1.3 1.3 DJUSTED 0.0 1.3 1.3	Apr SAMPI 0 1 COMM 1.3 00 13 HARVE 13 0.0 1.3	May LED HOU 1 0 1 UNITY (II 1.3 0 0 13 EST AND 13 0.0 1.3	ISEHOL 1 0 1 EXPANI 1.3 0.0 13 TAKE 1.3 0.0 1.3	DED) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0 0 0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3 0 3 4 0 0.0 4.0 Y (EXP. 4.0 0.0 4.0 4.0	1.3 0 0 1.3 0 0 1.3 ANDED) 1.3 0.0	2 0 2 2.7 0.0 2.7 2.7 0.0 2.7	1 0 1 1.3 0.0 1.3 0.0 1.3	0 0 0 0 0.0	14 2 16 10.7 2.7 21.3 18.7 2.7 21.3
REPORTED Harvest Struck & Last Total Take ESTIMATED Harvest Struck & Lost Total Take ESTIMATED Harvest Struck & Lost Total Take Total Take Total Take (%)	Jan HARVEST 2 0 2 HARVEST 2.7 0.0 2.7 SEASONA 2.7 0.0 2.7 12.5% 2.1	Feb AND 7 2 1 3 AND 2.7 1.3 4.0 ALLLY A 2.7 1.3 4.0 18.8% 6.7	Mar O 1 1 TAKE BY 0.0 1.3 1.3 DJUSTED 0.0 1.3 1.3 6.3% 8.6	Apr SAMPI 0 1 COMM 1.3 00 13 HARVE 13 0.0 1.3 6.3%	May LED HOU 1 0 1 UNITY (II 1.3 0 0 1 3 EST AND 1 3 0.0 1.3 6.3% 10.7	1 0 1 EXPANI 1.3 0.0 1.3 TAKE 1.3 0.0 1.3 6.3%	DED) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0 0 0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3 0 3 40 0.0 4.0 Y (EXP. 4.0 0.0 4.0	1.3 0 0 1.3 ANDED) 1.3 0.0 1.3 6.3%	2 0 2 2.7 0.0 2.7 2.7 0.0 2.7 12.5%	1 0 1 1.3 0.0 1.3 0.0 1.3 6.3%	0 0 0 0 0.0	14 2 16 10.7 2.7 21.3 18.7 2.7 21.3

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals In Alask a with assistance from the Ivanof Bay Traditional Village Council, 1995.

		Sea	Lion			Harbo	r Seal		
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.	
	Samp	le	(Expan	ded)	Sam	ple	(Expar	nded)	
	Number	%	Number	%	Number	%	Number	%	
Adult Male	0	-	0.0		4	28.8%	5.3	28.6%	
Adult Female	0	***	0.0	***	1	7.1%	1.3	7 1%	
Adult Unknown Sex	0		0.0		2	14.3%	2.1	143%	
Juvenile Male	0	***	00	***	0	0.0%	0.0	0.0%	
Juvenile Female	0		0.0		1	7.1%	1.3	7 1%	
Juvenile Unknown Sex	0		0.0		5	35.7%	6.7	35.7%	
Pup Male	0		0.0	•••	0	0.0%	0.0	0.0%	
Pup Female	0		0.0		0	0.0%	0.0	0.0%	
Pup Unknown Sex	0	***	0.0	***	1	7.1%	1.3	7.1%	
Male Unknown Age	0	•••	0.0		0	0.0%	0.0	0.0%	
Female Unknown Age	0		00		0	0.0%	0.0	0.0%	
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%	
Total	0	***	0.0	***	14	100.0%	18.7	100.0%	

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			<u> </u>	<u>L</u>		
		Struck/	Total			Struck/	Total	
<u>Ye</u>	er <u>Harvest</u>	Lost	<u>Take</u>		<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
199	92 0.0	0.0	0.0		1992	10.0	1.0	11.0
199	93 2.3	1.2	3.5		1993	16.3	4.7	21 . 0
199	94 0.0	0.0	0.0		1994	12.0	1.3	13.3
199	95 0.0	0.0	0.0		1995	18.7	2.7	21.3

SOURCE. Abska Department of Frsh and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, wib assistance from the Ivanof Bay Traditional Village Council, 1995

Table 39. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: King Cove, 1996

SAMPLING DESIGN:		<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	14	104	118	
	Surveyed Households	14	8	22	
	Sampling Fraction	100.0%	7.7%	18.6%	
Sai	nple Household Members	57	21	78	
Estim	ated Household Members	57.0	273. 0	330. 0	

HARVEST AND USE INFORMATION

Percentage of Native Househo	olds:	Estimated Community Harvest		
Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
Used 1.7%	441%	Total Number Harvested	5.0	43.0
Hunted 1.7%	20.3%	Total Number Struck and Lost	0.0	3.0
Harvested 1.7%	20.3%	Total Number Taken	5.0	52.0
Received 0.0%	41.5%			
Gave Away 1 7%	17.8%	Number Harvested Per Capita	0.02	0.15

SEA LION	I HARVE	ST B	Y MON	JТН								Ur	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE	BY SAMP	LED HOL	JSEHOLD:	S (UNEXP	ANDED)							
Harvest	0	0	2	1	0	0	0	1	1	0	0	0	0	5
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	1	0	0	0	1	1	0	0	0	0	5
ESTIMATED	HARVEST	AND .	TAKE B	Y COM	JUNITY	(EXPANI	DED)							
Harvest	0.0	0.0	2.0	10	0.0	0.0	0 0	1.0	10	0.0	0.0	0.0	0.0	5.0
Struck & Lost	0.0	00	0.0	0.0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	00	2.0	1.0	0 0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	5.0
ESTIMATED	SEASONA	LLY A	DJUSTE	HARV	EST AN	D TAKE	BY CO	MMUNIT	Y (EXP	ANDED)				
Harvest	0.0	0.0	2.0	1.0	00	0 0	0 0	10	1.0	0.0	0.0	0.0		5.0
Struck & Lost	0.0	0.0	0.0	00	00	0 0	0 0	00	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	. 0.0	2.0	1.0	00	0.0	0 0	1.0	1.0	0.0	0.0	0.0		5.0
Total Take (%)	0.0%	0.0%	40.0%	20.0%	00%	0.0%	0.0%	20.0%	20.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0 0	2.0	3.0	3.0	3.0	3.0	4.0	5.0	5.0	5.0	5.0		
Cum Take (%)	0.0%	00%	400%	600%	600%	60.0%	60.0%	800%	100.0%	100.0%	100.0%	100.0%		

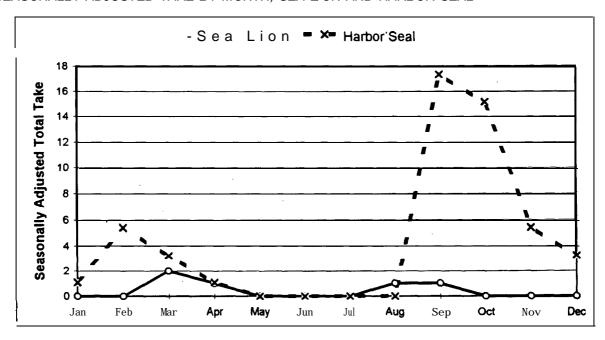
HARBOR	SEAL F		-	MONT	ТН							Į	Jnknown	
_	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPL	ED HO	USEHOL	DS (UI	NEXPANI	DED)					
Harvest	1	5	3	1	0	0	0	0	4	2	5	3	1	25
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total Take	1	5	3	1	0	0	0	0	4	2	5	3	4	28
ESTIMATED	HARVEST	AND 7	TAKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	1.0	5.0	3.0	1.0	0 0	0 0	0 0	0 0	16.0	14.0	5.0	3.0	1.0	49.0
Struck & Lost	0.0	0 0	0.0	0 0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	3.0	3.0
Total Take	1.0	5.0	3.0	1.0	0.0	0 0	0 0	0 0	16.0	14.0	5 0	3.0	40	52.0
ESTIMATED	SEASONA	ALLY A	JUSTED	HARVE	ST AND	TAKE	ву с	OMMUNIT	Ү (ЕХР	ANDED)				
Harvest	1.0	5.1	31	1.0	0 0	0 0	00	0 0	16.3	14.3	5.1	3.1		49.0
Struck & Lost	0.1	0.3	0.2	0.1	0.0	0 0	0.0	0.0	1.0	0.9	0.3	0.2		3.0
Total Take	1.1	5.4	3.3	1.1	0.0	0.0	0 0	0.0	17.3	15.2	5.4	3.3		52.0
Total Take (%)	2.1%	10.4%	6.3%	2.1%	0.0%	0.0%	0.0%	0.0%	33.3%	29.2%	10.4%	6.3%		100.0%
Cum. Take	1.1	6.5	9.8	10.8	10.8	10.8	10.8	10.8	28.2	a.3	48.8	52.0		
Cum. Take (%)	2. 1%	12. 5%	18.8%	20.8%	20. 8%	20. 8%	20.8%	20. 8%	54. 2%	83. 3%	938%	100.0%		

SOURCE: Alaska Department of Fish and Came, Division of Subsatence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Agdaagux Tribe of King Cove, Belofski Village Council, and City of King Cove, 1995.

		Sea	Lion			Harbo	r Seal	
	Reporte	ed by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.
	Sam	ple	(Expan	nded)	Sam	ple	(Expar	ided)
	Number	%	Number	%	Number	%	Number	%
Adult Male	2	40.0%	2. 0	40.0%	14	56.0%	26.0	53.1%
Adult Female	1	20.0%	1.0	20.0%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	00	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	2	400%	20	40.0%	8	32.0%	8. 0	16. 3%
Juvenile Female	0	00%	00	0.0%	2	8.0%	14. 0	28. 6%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	00	00%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	00%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	00	00%	0	00%	0.0	0. 0%
Male Unknown Age	0	00%	00	00%	0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	00	00%	0	0.0%	0.0	0.0%
Unknown Sex and Age	, 0	00%	00	00%	1	4. 0%	1.0	2. 0%
Total	5	1000%	5 0	1000%	25	100.0%	49.0	100.0%

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SEASONALLY ADJUSTED TAKE BY MONTH, SEA L/ON AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
Year	<u>Harvest</u>	Losi	Take	<u>Year</u>	Harvest	Lost	Take
1992	1.3	0.0	1. 3	1992	26. 0	6. 7	32. 7
1993	1.2	0.0	1.2	1993	12.6	3. 5	16. 3
1994	3. 2	1.1	4. 3	1994	20. 9	1.1	22. 0
1995	5. 0	0.0	5. 0	1995	49.0	3. 0	52.0

SOURCE. All aska Department of Fish and Game, **Division** of **Subsistence**, **Subsistence** Study and **Monitor System** for Sea**Lions** and Hambor Seals in All aska, with assistance from the Agdaagux Tribe'of King Cove. **Belofski Village Council**, and **City** of King Cove. **1995**

CENSUS Total Native Households 33

Surveyed Households 21 Sampling Fraction 63.6%

Sample Household Members 79 Estimated Household Members 124.1

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LAKAESTAIND	USE	INFURIVIATION

Percentage of Native Households: Estimated Community Harvest

			- · · · · · · · · · · · · · · · · · · ·		
	Sea Ha	arbor	and Take (Expanded):	S e a	Harbor
	<u>Lion</u>	Seal		Lion	<u>Seal</u>
Used	5 2 . 4 %	90.5%	Total Number Harvested	3.1	11.0
Hunted	28.6%	52.4%	Total Number Struck and Lost	0.0	3.1
Harvested	4.8%	14.3%	Total Number Taken	3.1	14.1
Received	47.6%	81.0%			
Gave Away	4.8%	14.3%	Number Harvested Per Capita	0.03	0.09

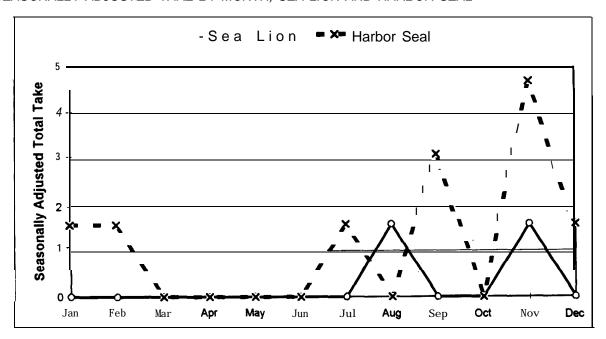
													Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nw	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE I	BY SAMPL	ED HOU	SEHOLDS ((UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	1	0	0	1	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	1	0	0	1	0	0	2
ESTIMATED	HARVEST	AND 7	TAKE BY	COMM	UNITY (E	XPAND	ED)							
Harvest	0.0	0.0	0.0	00	0.0	0 0	00	1.6	0 0	0.0	1.6	0.0	0.0	3.1
Struck & Lost	0.0	0.0	0.0	00	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0 0
Total Take	0.0	0.0	0.0	00	0 0	0 0	00	1.6	0 0	0 0	16	0.0	0.0	31
ESTIMATED	SEASONA	LLY A	JUSTED	HARVE	ST AND	TAKE	BY CO	MMUNI	TY (EXP	ANDED)				
Harvest	0 0	0.0	0.0	0 0	0 0	0 0	0 0	16	0 0	0.0	16	0 0		31
Struck & Lost	0 0	0.0	0 0	0 0	0.0	0 0	0.0	0 0	0.0	0 0	0 0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0 0	0 0	1.6	0 0	0.0	1.6	0.0		3.1
Total Take (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	500%	0.0%	0.0%	50.0%	0.0%		100.0%
Cum Take	0.0	0.0	0.0	0.0	0.0	0 0	0.0	1.6	1.6	1.6	3.1	3.1		
Cum Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	50.0%	500% 5	0.0% 1	00.0%	100.0%		

HARBOR	SEAL F	IARVE	ST BY	MON	TH								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Total
REPORTED	HARVEST	AND T	AKE BY	SAMP	LED HOU	SEHOL	DS (UN	EXPANDE	D)					
Harvest	1	1	0	0	0	0	1	0	2	0	2	0	0	7
Struck & Lost	0	0	0	0	0	0	0	0	0	0	1	1	0	2
Total Take	1	1	0	0	0	0	1	0	2	0	3	1	0	9
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (I	EXPAND	ED)							
Harvest	1.6	1.6	0.0	0.0	0 0	00	16	0.0	3 1	0.0	3.1	0.0	0.0	11.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	00	0 0	0.0	0.0	1.6	1.6	0.0	3.1
Total Take	1.6	1.6	0.0	0.0	0 0	00	16	0 0	31	0.0	4.7	1.6	0.0	14.1
ESTIMATED	SEASONA	ALLY AI	DJUSTED	HARVI	EST AND	TAKE	ву со	MMUNITY	(EXP	ANDED)				
Harvest	1.6	1.6	0.0	0 0	0 0	0 0	16	0 0	31	0.0	3 1	0.0		110
Struck & Lost	0.0	0.0	0.0	00	0.0	00	00	0 0	0.0	0.0	1.6	1.6		31
Total Take	1.6	1.6	0.0	0.0	0 0	00	16	0 0	31	0 0	4.7	1.6		141
Total Take (%)	11.1%	11.1%	00%	00%	0.0%	00%	111%	0 0 %	22.2%	0.0%	33.3%	11 1%		100.0%
Cum. Take	1.6	3.1	3.1	3.1	31	3.1	47	4.7	7.9	7.9	12.6	14.1		
Cum.Take(%)	11.1%	22.2%	22.2%	22.2%	22.2%	22.2%	33.3%	33.3%	5.6%	55.6%	88.9%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alask with assistance from the Perryville Traditional Village Council, 1995.

		Sea	Lion			Harbo	r Seal	
	Reporte	ed by	Commun	ity Est	Reporte	ed by	Communi	ty Est.
	Samı	ple	(Expar	ided)	Samp	ole	(Expand	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	1	50.0%	1.6	50.0%	2	28.6%	3 . 1	28.6%
Adult Female	1	50.0%	1.6	50.0%	3	42.9%	4.7	42.9%
Adult Unknown Sex	0	0.0%	0.0	0.0%	2	20.6%	3.1	20.6%
Juvenile Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	2	100.0%	3.1	100.0%	7	100.0%	11.0	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	\L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	1.1	0.0	1.1	1992	8.9	2.2	11.1
1993	0.0	0.0	0.0	1993	12.8	2. 1	15. 0
1994	1.4	0.0	1.4	1994	21. 1	0.0	21. 1
1995	3. 1	0.0	3. 1	1995	11.0	3. 1	14. 1

SOURCE: Alaska Department of Fish and Game, **Division** of **Subsistence**, Subsistence Study and Monitor System for Sea Liins and Harbor Seals **in** Alaska, with assistance **from the** Perryville **Traditional** Village Council, **1995**.

Table 41. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Sand Point, 1995

SAMPLING DES	NGN:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	15	125	140	
	Surveyed Households	13	24	37	
	Sampling Fraction	86.7%	19.2%	26.4%	
	Sample Household Members	56	84	140	
	Estimated Household Members	64.6	437.5	502.1	

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Percentage of Native Househo	olds:	Estimated Community Harvest		
Sea I	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	Seal		Lion	Seal
used 0.0%	16.1%	Total Number Harvested	0.0	9.2
Hunted 0.0%	4.1%	Total Number Struck and Lost	0.0	0.0
Harvested 0.0%	4.1%	Total Number Taken	0.0	9.2
Received 0.0%	12.0%			
Gave Away 0.0%	2.5%	Number Harvested Per Capita	0.00	0.02

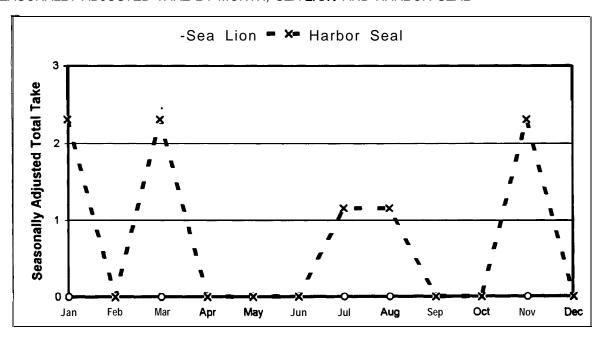
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	jul	Aug	Sap	Oct	Nov	Dec M	onth	Total
REPORTED HAR	VEST AND	TAKE B	Y SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED I	HARVEST	AND T	AKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0 0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0 0
Struck & Lost	0.0	00	0 0	00	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0
Total Take	0 0	0.0	0 0	00	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0 0
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0 0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0	0 0	0 0	0 0		00
Struck & Lost	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	b.p	0.0	0 0	0 0	0.0	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Total Take (%)							200			-		***		
Cum Take	0.0	0.0	0.0	00	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0		
Cum Take (%)		***		***			_	***						,

HARBOR	SEAL H	ARVE	ST BY	MON	TH							Ur	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HOU	SEHOL	DS (UI	IEXPAND	ED)					
Harvest	2	0	2	0	0	0	1	1	0	0	2	0	0	8
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	2	0	2	0	0	0	1	1	0	0	2	0	0	8
ESTIMATED	HARVEST	AND	TAKE BY	COMN	MUNITY (E	XPAN	DED)							
Harvest	2.3	0.0	2.3	0 0	00	00	12	1.2	0 0	0.0	23	0.0	0.0	9.2
Struck & Lost	00	0.0	0.0	00	00	00	00	00	0.0	00	0.0	00	0.0	0.0
Total Take	2.3	0.0	23	0 0	0 0	0 0	12	1.2	0.0	0.0	2.3	0.0	0.0	9.2
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	ву с	OMMUNIT	Y (EXPA	ANDED)				
Harvest	2.3	0.0	23	0 0	0 0	0 0	12	1.2	0 0	0 0	2.3	0 0		9.2
Struck & Lost	0.0	0 0	0.0	0.0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	2.3	0.0	2.3	0.0	0 0	0 0	1.2	1.2	0.0	0.0	2.3	0.0		9.2
Total Take (%)	25.0%	00%	25.0%	00%	0.0%	00%	12.5%	12.5%	0.0%	0.0%	25.0%	0.0%		100.0%
Cum. Take	2.3	2.3	4.6	4.6	46	46	58	6.9	6.9	6.9	9.2	9.2		
Cum. Take (%)														

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the City of Sand Point, Unga Tribal Council, and Qagan Tayagungi Tribe of Sand Point, 1995

		Sea	a Lion			Harbo	or Seal	
	Reporte	d by	Communi	ty Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expanded)		Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		5	62.5%	5. 8	62.5%
Adult Female	0		0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0		1	12.5%	1.2	12.5%
Juvenile Male	0	•	0.0		0	0.0%	0.0	0.0%
Juvenile Female	0	***	0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	***	0.0		1	12.5%	1.2	12.5%
Pup Male	0	•••	0.0		1	12.5%	1.2	12.5%
Pup Female	0	***	0.0	-	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	244	0.0	***	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		, 0	0.0%	0.0	0.0%
Female Unknown Age	0	-	0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%
Total	0		0.0		a	100.0%	9.2	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u> </u>	HARBOR SEAL					
		Struck/	Total	· · · · · · · · · · · · · · · · · · ·		Struck/	Total			
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	0.0	0.0	0.0	1992	37.9	0.0	37.9			
1993	0.0	0.0	0.0	1993	13.3	1.2	14.4			
1994	0.0	0.0	0.0	1994	7.8	4.3	12.1			
1995	0.0	0.0	0.0	1995	9.2	0.0	9.2			

SOURCE: Alaska Department of Fish and Game, **Division** of Subsistence, **Subsistence** Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from **the** City of Sand Point, Unga Tribal Council, and **Qagan** Tayagungi **Tribe** of Sand Point, **1995**.

SAMPLING DESIGN: CENSUS

Total Native Households
Surveyed Households
Sampling Fraction
Sample Household Members
T3
Estimated Household Members
73.0

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest and Take (Expanded): Sea Harbor Sea Harbor Lion Seal Lion Seal used 100.0% 1000% Total Number Harvested 7.0 6.0 Hunted 9.7% Total Number Struck and Lost 12.9% 0.0 0.0 Harvested 9.7% 97% Total Number Taken 6.0 7.0 Received 100.0% 100.0% Gave A way 6.5% 97% Number Harvested Per Capita 0.08 0.10

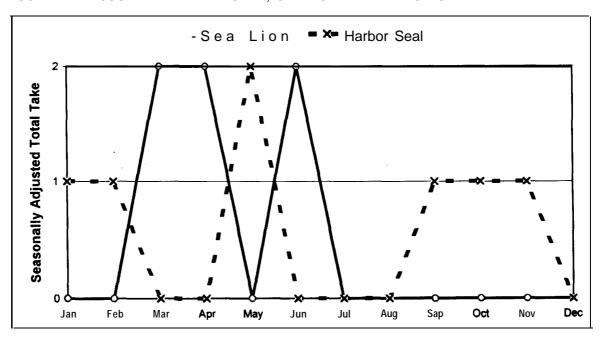
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE	BY SAM	PLED HO	USEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	2	2	0	2	0	0	0	0	0	0	0	6
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	2	2	0	2	0	0	0	0	0	0	0	6
ESTIMATED	HARVEST	AND	TAKE E	BY COM	MUNITY	(EXPAND	DED)							
Harvest	0.0	0.0	2.0	2.0	0.0	2.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	6.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	2.0	20	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
ESTIMATED	SEASONA	LLY A	DJUSTE	D HAR	EST AN	D TAKE	BY C	OMMUNI	TY (EXI	PANDED))			
Harvest	0 0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0 0	0.0	0 0	0.0		6.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	0 0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0		6.0
Total Take (%)	0.0%	0.0%	33.3%	33.3%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	00%	0.0%		100.0%
Cum Take	0.0	0.0	2.0	4.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		
Cum Take (%)	0.0%	00%	33.3%	66.7% 6	6.7% 10	0.0% 10	0 0%	100 0%	1000%	100.0%	100.0%	1000%		

HARBOR S	SEAL H	IARVE	ST BY	MON	ΙΤΗ								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED H	IARVEST	AND	TAKE BY	SAMP	LED HO	USEHOI	LDS (U	NEXPAN	DED)					
Harvest	1	1	0	0	2	0	0	0	1	1	1	0	0	7
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	1	1	0	0	2	0	0	0	1	1	1	0	0	7
ESTIMATED I	HARVEST	AND	TAKE BY	COM	NUNITY	(EXPAN	DED)							
Harvest	1.0	1.0	0.0	0.0	2.0	0.0	0 0	0.0	1.0	1.0	1.0	0.0	0.0	7.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	1.0	1.0	0.0	0.0	2.0	0.0	0 0	0.0	1.0	1.0	1.0	0.0	0.0	7.0
ESTIMATED	SEASON	ALLY A	ADJUSTE	D HAR	/EST AN	ND TAKI	Е ВУ С	OMMUNI	TY (EXI	PANDED)				
Harvest	1.0	1.0	0.0	0.0	2.0	0 0	0.0	0.0	10	1.0	1.0	0.0		70
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0. 0	0.0	0.0	0.0	0.0		0.0
Total Take	1.0	1.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0		7.0
Total Take (%)	14.3%	14.3%	0.0%	0.0%	28.6%	0.0%	0.0%	0.0%	14.3%	14.3%	14.3%	0.0%		100.0%
Cum. Take	1.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	5.0	6.0	7.0	7.0		
Cum.Take(%) 14.3%	266%	26.6%	26.6%	57.1%	57.1%	57.1%	57.1%	71.4%	657% 1	00.0%	100.0%	·	

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Akutan Traditional Village Council, City of Akutan, and Akutan Corporation, 1995.

	Sea Li	on	HarborS	Seal
	Reported by	Community Est	Reported by	Community Est.
	Sample	(Expanded)	Sample	(Expanded)
	Number %	Number %	Number %	Number %
Adult Male	3 50.0%	3 . 0 50.0%	6 66.7%	6.0 8 5. 7%
Adult Female	2 333%	2.0 333%	0 0.0%	0.0 0.0%
Adult Unknown Sex	0 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Juvenile Male	1 16.7%	1.0 16.7%	1 14.3%	1.0 14.3%
Juvenile Female	0 00%	0.0 0.0%	0 0.0%	0.0 0.0%
Juvenile Unknown Sex	0 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Pup Male	0 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Pup Female	o 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Pup Unknown Sex	0 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Male Unknown Age	0 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Female Unknown Age	0 0.0%	00 0.0%	0 0.0%	0.0 0.0%
Unknown Sex and Age	0 0.0%	0.0 0.0%	0 0.0%	0.0 0.0%
Total	6 100.0%	6.0 100.0%	7 100.0%	7.0 100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

		SEA	LION			H	IARBO	R SEA	L
,			Struck/	Total				Struck/	Total
	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>		<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
	1992	25.7	4.3	30.0	1	1992	12.9	4.3	17.1
	1993	14.5	6.9	23.4	1	1993	15.6	4.5	20.1
	1994	12.7	3.5	16.2	1	1994	13.8	3.5	17.3
	1995	6.0	0.0	6.0	•	1995	7.0	0.0	7.0

SOURCE. **Alaska** Department of Fish and Game, **Division** of Subsistence, **Subsistence** Study and **Monitor** System for Sea **Lions** and Harbor **Seals in** Alaska, with assistance from the Akutan **Traditional** Village **Council**, **City** of Akutan, and Akutan Corporation, **1995**

Table 43. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Atka, 1995

CENSUS Total Native Households 25

Surveyed Households 10
Sampling Fraction 40.0%
Sample Household Members 38

Estimated Household Members 95.0

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

	Sea	Harbor	and Take (Expanded):	Sea	Harbor
	<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
used	90.0%	90.0%	Total Number Harvested	40.0	42.5
Hunted	50.0%	50.0%	Total Number Struck and Lost	0.0	0.0
Harvested	30.0%	50.0%	Total Number Taken	40.0	42.5
Received	80.0%	90.0%			
Gave Away	30.0%	50.0%	Number Harvested Per Capita	0 42	0.45

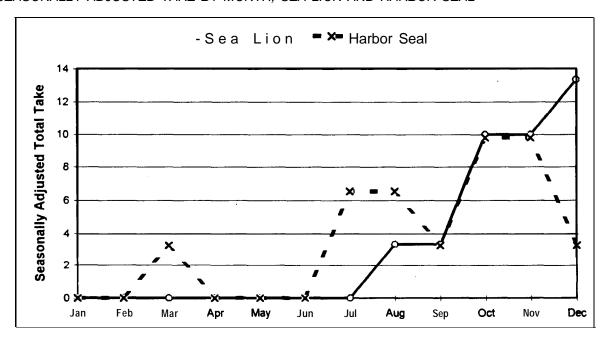
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	lonth	Total
REPORTED HA	ARVEST AND	TAKE	BY SAMPL	ED HOUS	EHOLDS	(UNEXP	ANDED)							
Harvest	0	0	0	0	0	0	0	1	1	3	3	4	4	16
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	1	1	3	3	4	4	16
ESTIMATED	HARVEST	AND	TAKE BY	COMMI	UNITY (EXPAN	DED)	•	•					
Harvest	0.0	0 0	0.0	0 0	00	00	0 0	2.5	2.5	7.5	7.5	10.0	10.0	40.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	00	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	00	0 0	25	2.5	7.5	7.5	10.0	10.0	400
ESTIMATED	SEASONA	LLY A	JUSTED	HARVES	ST AND	TAKE	BY COM	MUNI	TY (EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	00	00	0 0	3 3	33	10.0	10.0	13.3		40.0
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0 0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0.0	3.3	3.3	10.0	10.0	13.3		40.0
Total Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	0.3%	6 . 3 %	25.0%	25.0%	33.3%		100.0%
Cum Take	0.0	0.0	0.0	0.0	0 0	0 0	0 0	3 3	6.7	16.7	26.7	40.0		
Cum Take (%)	0.0%	00%	0.0%	0.0%	00%	00%	00%	03%	16.7% 4°	1 7%	66.7%	100.0%		

HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ckt	Nov	Dec	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	ED HOU	SEHOL	DS (UN	EXPAND	ED)					
Harvest	0	0	1	0	0	0	2	2	1	3	3	1	4	17
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	1	0	0	0	2	2	1	3	3	1	4	17
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPAN	DED)							
Harvest	0.0	0.0	2.5	0.0	0 0	0 0	5.0	5.0	2.5	7.5	7.5	2.5	10.0	42.5
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	2.5	0 0	0 0	0 0	50	5.0	2.5	7.5	7.5	2.5	10.0	42.5
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	0.0	0.0	3.3	0 0	0 0	0 0	65	6.5	3.3	98	9.8	3.3		42.5
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	3.3	0 0	0.0	00	65	6.5	3.3	9.8	9.6	3.3		42.5
Total Take (%)	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	154%	154%	7.7%	23.1%	23.1%	7.7%		100.0%
Cum.Take	0.0	0.0	3.3	3 3	3.3	3 3	9.8	16.3	19.6	294	39.2	42.5		
Cum. Take (%)	0.0%	0.0%	7.7%	7.7%	77%	77%	23 1%	38.5%	46.2%	59.2%	92.3%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaska, with assistance from the Atka IRA Council and City of Atka, 1995

		S	ea Lion			Harbo		
	Report	ed by	Commun	ity Est	Report	ed by	Commun	ity Est.
	Sam	ple	(Expar	nded)	Sam	ple	(Expa	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	4	25.0%	10.0	25.0%	11	64.7%	27.5	64.7%
Adult Female	5	31.3%	12.5	31.3%	1	5.9%	2.5	5.9%
Adult Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Male	1	6.3%	2.5	6.3%	1	5.9%	2.5	5.9%
Juvenile Female	2	12.5%	5.0	12.5%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	00%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0 0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0 0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	4	250%	10.0	25.0%	4	23.5%	10.0	23.5%
Total	16	100.0%	40.0	100.0%	17	100.0%	42.5	100 0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

SEA LION			IARBOI	R SEAI	
Struck/	Total			Struck/	Total
Year Harvest Lost	<u>Take</u>	Year	<u>Harvest</u>	Lost	<u>Take</u>
1992 28.6 9.9	38.5	1992	28.6	9.9	38.5
1993 25.1 0.0	25.1	1993	32.7	0.0	32.7
1994 45.5 8.7	54.2	1994	73.7	8.7	82.3
1995 40.0 0.0	40.0	1995	42.5	0.0	42.5

SOURCE Alaska Department of Fish and Game, Dilision of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seals in Alaska, with assistance from the Atka IRA Council and City of Atka, 1995.

CENSUS

Total Native Households Surveyed Households Sampling Fraction Sample Household Members

Estimated Household Members

No Data

HARVEST AND USE INFORMATION

Sea Harbor

No data

Percentage of Native Households:

Estimated Community Harvest

Sea Harbor and Take (Expanded):

Lion Seal

Lion Seal **Total Number Harvested** Used

Total Number Struck and Lost Hunted

No data Total Number Taken

Harvested Received

Number Harvested Per Capita Gave Away

SEA LION HARVEST BY MONTH Unknown Dec Month Total Oct Nov Aug Sep May Jun Jul Jan Feb Mar REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED) Struck & Lost Total Take No Data ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest Struck & Lost Total Take ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Struck & Lost Total Take

HARBOR SEAL HARVEST BY MONTH Dec Oct Nov Sep Aug Apr

REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED)

Harvest

Struck & Lost Total Take

Total Take (%) Cum Take Cum Take (%)

ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED)

No Data

Unknown

Month

Total

Harvest Struck & Lost

Total Take

ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED)

Harvest

Struck & Lost

Total Take

Total Take (%)

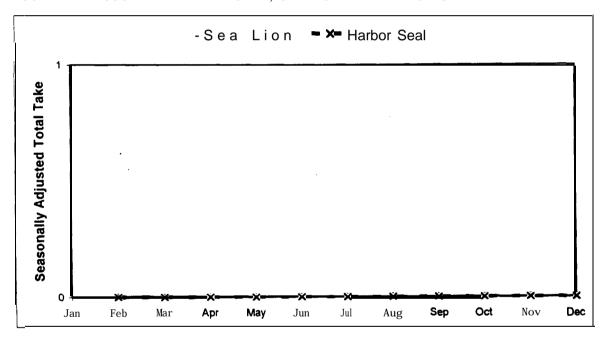
Cum Take

Cum Take (%)

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nikolski IRA Council and Chaluka Corporation, 1995.

	Se	a Li on	Harbor Seal					
	Reported by	Community Est.	Reported by	Community Est.				
	Sample	(Expanded)	Sample	(Expanded)				
	Number %	Number %	Number %	Number %				
Adult Male Adult Female Adult Unknown Sex Juvenile Male Juvenile Female Juvenile Unknown Sex Pup Male Pup Female Pup Female Pup Unknown Sex Male Unknown Age Female Unknown Age Unknown Sex and Age Total	No Data		No Data					

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION		 	HARBOR SEAL					
		Struck/	Total			struck/	Total			
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	8. 2	0.0	8. 2	1992	5.8	3. 5	9. 3			
1993	6. 0	0.0	6.0	1993	4.0	1.0	5. 0			
1994	0.0	0.0	0.0	1994	6.0	0.0	6.0			
1995		No Data	ı	1995		No Data	l .			

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Nikolski IRA Council and Chaluka Corporation, 1995.

Table 45. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Unalaska, 1995

SAMPLING DES	IGN:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	32	73	105	
	Surveyed Households	23	20	43	
	Sampling Fraction	71.9%	27.4%	41.0%	
	Sample Household Members'	` 75	52	127	
	Estimated Household Members	104.3	189.8	294.1	

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

Sea Harbor and Take (Expanded): Sea Harbor <u>Lion</u> Seal Lion <u>Seal</u> used 25.8% 26.7% Total Number Harvested 39.0 37.4 Hunted 6.6% 8.8% Total Number Struck and Lost III 9.7 Harvested 6.6% Total Number Taken 50.1 8.8% 47.1 Received 25.8% 21.9% Gave Away 6.6% Number Harvested Per Capita 0.13 8.8% 0.13

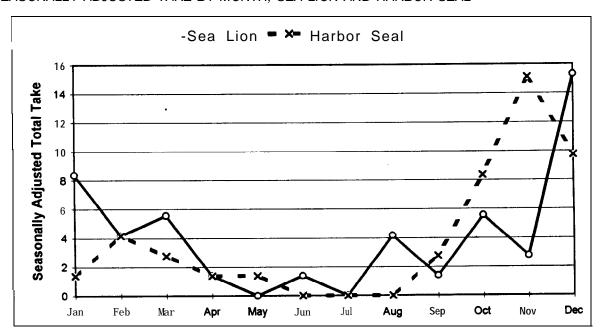
SEA LION HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAI	RVEST AND	TAKE B	SY SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	5	3	3	0	0	1	0	2	1	3	1	9	0	28
Struck & Lost	1	0	1	1	0	0	0	1′	0	1	1	2	0	. 8
Total Take	6	3	4	1	0	1	0	3	1	4	2	11	0	36
ESTIMATED	HARVEST	AND T	AKE BY	COMMI	JNITY (E	XPAND	ED)							
Harvest	7.0	4.2	4.2	0 0	0 0	14	00'	28	14	4.2	1.4	12.5	0.0	39.0
Struck & Lost	1.4	0 0	14	14	0 0	0 0	0 0	14	00	14	1.4	2.8	0.0	11.1
Total Take	8.3	4.2	5 6	14	0 0	14	0 0	42	14	5 6	2.8	15.3	0.0	50.1
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXP	ANDED)				
Harvest	7 0	4.2	4.2	0 0	0 0	14	0 0	26	14	4.2	14	12.5		39.0
Struck & Lost	14	0 0	14	14	0 0	00	0 0	14	00	14	1.4	28		11.1
Total Take	8.3	4.2	5.6	14	0 0	14	0 0	42	14	5.6	2.8	15.3		50.1
Total Take (%)	16.7%	8.3%	11.1%	2.8%	0.0%	28%	00%	83%	2.8%	11.1%	5.6%	30.8%		100.0%
Cum. Take	8.3	125	18.1	195	19.5	20,9	209	250	264	32.0	34.8	50.1		
Cum Take(%	6) 16.7%	250%	361%	389%	389%	417%	417%	50 0%	528%	639%	69 4%	100.0%		

HARBOR	SEAL H	ARVE	ST BY	MON	TH							l	Jnknown	j
	Jan	Feb	Mar	Apr	May	Jun	Jut	Au9	Sep	Oct	Nov		Month	Total
REPORTED	HARVEST	AND 7	TAKE BY	SAMPL	ED HOL	JSEHOL	DS (UN	EXPAND	ED)					
Harvest	1	3	1 '	1	1	0	0	0	1	5	5	4	0	22
Struck & Lost	0	0	1	0	0	0	0	0	1	1	1	3	0	7
Total Take	1	3	2	1	1	0	0	0	2	6	6	7	0	29
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (EXPAND	DED)							
Harvest	14	4.2	14	14	14	00	00	00	14	7.0	13.7	5.6	0.0	37 4
Struck & Lost	0.0	0 0	1.4	0.0	00	00	00	00	14	14	14	4.2	0.0	9. 7
Total Take	1.4	4.2	2.8	14	14	00	00	00	28	8.3	15.1	9. 7	0.0	47.1
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	1.4	4.2	1.4	14	14	00	00	00	14	7.0	137	5 6		37 4
Struck & Lost	0.0	0.0	1.4	0.0	00	00	00	00	14	14	14	4.2		9. 7
Total Take	1.4	4.2	2.8	14	14	00	00	00	2.8	8.3	15.1	9.7		47.1
Total Take (%)	3.0%	8.9%	5.9%	30%	3.0%	00%	00%	00%	5.9%	17.7%	32.1%	20.7%		100.0%
Cum. Take	1.4	5.6	8.3	97	11 1	ʻII 1	11 1	11 1	13.9	22.3	37.4	47.1		
Cum. Take (%)	3.0%	11.6%	11.1%	20.7%	23.6%	23.6%	236%	236%	295%	47.2%	79.3%	100.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Qawalangin Tribal Council, 1995.

7,1,11,17,20,7,1,02,7,1,1,0	,_,	Se	a Lion			Harbo	rSeal	
	Reporte	d by	Commun	ity Est.	Report	ed by	Commun	ty Est.
	Samı	o le	(Expar	ided)	Sam	ple	(Expan	ded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	5	17.9%	7. 0	17. 9%	10	45.5%	20. 7	55. 3%
Adult Female	1	3.6%	1.4	3.6%	1	4. 5%	1.4	3. 7%
Adult Unknown Sex	1	3. 6%	1.4	3.6%	1	4.5%	1.4	3. 7%
Juvenile Male	12	42.9%	16. 7	42.9%	5	227%	7.0	18.6%
Juvenile Female	3	10.7%	4. 2	10. 7%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	6	21.4%	0.3	21. 4%	5	22. 7%	7. 0	10.6%
Pup Male	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	00	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	28	100.0%	39.0	100.0%	22	100.0%	37. 4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	L
		Struck/	Total	-		Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	Take	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	41.6	16.7	66.5	1992	2 47.0	3. 7	50.8
1993	53. 4	15. 9	69. 3	1999	3 32.7	9. 9	42.6
1994	43.6	6. 4	51.9	199	4 31.4	10.5	41.6
1996	39.0	11.1	50.1	199	6 37.4	9. 7	47. 1

SOURCE Alaska Department of Fish ad Game, Division of **Subsistence**, **Subsistence** Study and Monitor System for Sea Lii and **Harbor** Seals in Al aska, with **assistance** from the Qawalangin **Tribal** Council, 1995.

CENSUS
Total Native Households
Surveyed Households
Sampling Fraction
Sample Household Members
131

HARVEST AND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest and Take (Expanded): Sea Harbor Sea Harbor Lion Seal Lion Seal Total Number Harvested 4.0 used 19.0% 0.0% 0.0 Hunted 11.9% **Total Number Struck and Lost** 0.0% 0.0 Harvested 4.8% Total Number Taken 0.0

Estimated Household Members

Harvested 4.8% 0.0% Received 14.3% 0.0% Gave Away 2.4% 0.0%

Number Harvested Per Capita 0.03 0.00

131.0

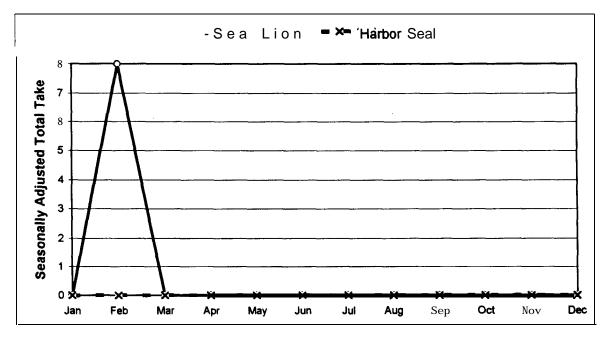
SEA LION				_					_			_	Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Total
REPORTED HA	RVEST AN	ID TAKE	BY SAMP	LED HO	USEHOLDS	(UNEXP	ANDED)							
Harvest	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Struck & Lost	0	1	0	0	0	0	0	0	0	0	0	0	3	4
Total Take	0	5	0	0	0	0	0	0	0	0	0	0	3	8
ESTIMATED	HARVES	T AND	TAKE B	у сом	MUNITY	(EXPAN	DED)							
Harvest	0.0	4.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0 0	0.0	0.0	4.0
Struck & Lost	0.0	1.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	30	4.0
Total Take	0.0	5.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	8.0
ESTIMATED	SEASON	ALLY A	DJUSTEI) HAR	/EST AN	D TAKE	Е ВУ С	OMMUN	ITY (EXP	ANDED)			
Harvest	0.0	4.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		4.0
Struck & Lost	0.0	4.0	0.0	0 0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0 0		40
Total Take	0.0	8.0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0	0 0	0.0		8.0
Total Take (%)	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum Take	0.0	8.0	8.0	8.0	8.0	8.0	8 0	8.0	8.0	8.0	8.0	8.0		
Cum Take (%)	0.0%	100.0%	190.0%	100.0%	100.0%	100.0%	1000%	100.9%	100.0% 1	00.0%	100.0%	100.0%		

HARBOR	SEAL H		ST BY	MONTH	1								Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND 1	TAKE BY	SAMPLE	D HOU	SEHOL	DS (UNE	XPANDE	D)					
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMMUN	NITY (E	XPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVES	T AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0 0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)								•••	***	-	-	_		
Cum Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Ta	ake(%)			·		-				-	•••			

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the St. George Traditional IRA Council, City of St. George, and St. George Tanaq Corporalron, 1995

		Sea	Lion		Harbor Seal					
	Report	ed by	Community	Est.	Reporte	d by	Communi	ty Est		
	San	nple	(Expar	ded)	Samp	ole	(Expan	ded)		
	Number	%	Number	%	Number	%	Number	%		
Adult Male	4	100.0%	4. 0	100.0%	0	•••	0.0			
Adult Female	0	0.0%	0.0	0.0%	0	_	0.0			
Adult Unknown Sex	0	0.0%	0.0	0.0%	0		0.0	_		
Juvenile Male	0	0.0%	0.0	0.0%	0		0.0			
Juvenile Female	0	0.0%	0.0	0.0%	0		0.0			
Juvenile Unknown Sex	0	0.0%	0.0	0.0%	0		0.0			
Pup Male	0	0.0%	0.0	0.0%	0		0.0	***		
Pup Female	0	0.0%	0.0	0.0%	0	-	0.0			
Pup Unknown Sex	0	0.0%	0 0	00%	0		0.0			
Male Unknown Age	0	0.0%	0 0	0.0%	0		0.0			
Female Unknown Age	0	00%	0.0	0.0%	0		0.0			
Unknown Sex and Age	0	0.0%	0.0	0.0%	0		0.0			
Total	4	1000%	4.0	100.0%	0		0.0			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBO	R SEA	L
		struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	<u>Lost</u>	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>
1992	14. 9	55.0	89. 9	1992	0.0	0.0	0.0
1993	3. 7	14.8	18. 8	1993	0.0	0.0	0.0
1994	2. 8	17. 1	19. 9	1994	0.0	0.0	0.0
1995	4. 0	4.0	8. 0	1995	0.0	0.0	0.0

SOURCE. Alaska Department of Fish and **Game**, **Division** of **Subsistence**, **Subsistence** Study and **Monitor** System for Sea Liis and Harbor Seals **In** Alaska, with assistance from the **St**. George **Traditional** IRA **Council**, City of **St**. George, and **St**. **George Tranal Corporation**, 1995.

Table 47. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: St. Paul, 1995

SAMPLING DESIG	GN:	Active	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	59	100	159	
	Surveyed Households	47	29	76	
	Sampling Fraction	79.7%	29.0%	47.0%	
	Sample Household Members	210	108	318	
I	Estimated Household Members	263.6	372.4	636.0	

HARVEST AND USE INFORMATION

Percentage of Native Househo	olds:	Estimated Community Harvest		
S e a	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		<u>Lion</u>	<u>Seal</u>
Used 623%	3.9%	Total Number Harvested	53.6	2.5
Hunted 21.7%	0.8%	Total Number Struck and Lost	6.3	0.0
Harvested 17.8%	0.8%	Total Number Taken	59.9	2.5
Received 57.8%	3.2%			
Gave Away 18.5%	08%	Number Harvested Per Capita	0.08	0.00

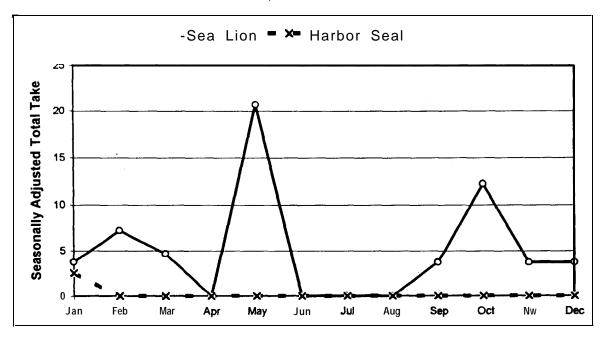
SEA LION	I HARV	EST E	BY MON	TH									Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AN	D TAKE	BY SAMPL	ED HOU	SEHOLDS	(UNEXPA	NDED)							
Harvest	3	4	0	0	10	0	0	0	3	8	3	3	0	34
Struck & Lost	0	0	3	0	1	0	0	0	0	0	0	0	1	5
Total Take	3	4	3	0	11	0	0	0	3	8	3	3	1	39
ESTIMATED	HARVES	T AND	TAKE BY	COMM	IUNITY (I	EXPAND	DED)							
Harvest	3 0	7.2	0.0	0 0	191	00	0 0	0 0	3.8	12.2	3.8	3.0	0.0	53.6
Struck & Lost	0 0	0 0	38	00	1.3	00	0 0	0 0	00	0.0	00	0.0	1.3	63
Total Take	3 6	7.2	3.0	0.0	204	00	0 0	0 0	38	122	3.8	38	13	599
ESTIMATED	SEASON	ALLY A	DJUSTED	HARV	EST AND	TAKE	BY CO	MMUNIT	Ү (ЕХР	ANDED)				
Harvest	3.8	7.2	0.0	0.0	191	00	0 0	0 0	36	12.2	3.8	3.8		53.6
Struck & Lost	0.0	0.0	4.7	0.0	1.6	00	0 0	0 0	00	0.0	0 0	0.0		63
Total Take	3.8	7.2	4.7	0.0	20.7	0 0	0 0	0.0	3.8	12.2	3.8	3.8		59.9
Total Take (%)	6.3%	12.0%	79%	0.0%	34.5%	00%	00%	00%	6.3%	264%	6.3%	6.3%		100.0%
Cum. Take	3.8	11.0	15.7	157	364	364	364	364	48.2	52.4	56.2	59.9		
Cum Take (%)	63%	18.3%	26.2%	26.2%	68.7%	607%	60.7%	607%	678%	07.4%	937%	100.0%		

HARBOR	SEAL H	IARVI	EST BY	MON'	TH							U	nknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec N	lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPI	LED HOU	SEHOL	DS (UN	EXPANDI	ED)					
Harvest	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	2	0	0	0	0	0	0	0	0	0	0	0	0	2
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (E	XPAND	DED)							
Harvest	2.5	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	2.5
Struck 8 Lost	0.0	0.0	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	2.5	0 0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
ESTIMATED	SEASONA	LLY A	ADJUSTED	HARVI	EST AND	TAKE	BY CO	MMUNITY	(EXP	ANDED)				
Harvest	2.5	0.0	0 0	0 0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0.0		2.5
Struck & Lost	0.0	0 0	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0		0.0
Total Take	2.5	0.0	0.0	0 0	0 0	0.0	0 0	0 0	00	0 0	0.0	0.0		2 5
Total Take (%)	100 9%	0.0%	0.0%	0.0%	0.0%	0.0%	00%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	2.5	2.5	2.5	2.5	2.5	2.5	25	2.5	2.5	2.5	2.5	2.5		
Cum. Take(%)														

SOURCE Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the City of St. Paul and Tribal Government of St. Paul, 1995.

		Sea	Lion				Harbo	r Seal	
	Reporte	ed by	Commun	ity Est		Report	ed by	Commun	ity Est.
	Sam	ple	(Expar	ided)		Sam	ple	(Expar	ided)
	Number	%	Number		%	Number	%	Number	%
Adult Male	2	5.9%	2.5	4.7%		0	0.0%	0.0	0.0%
Adult Female	0	00%	0.0	0.0%		0	0.0%	0.0	0.0%
Adult Unknown Sex	0	0.0%	0.0	0.0%		0	0.0%	0.0	0.0%
Juvenile Male	26	76.5%	34.0	64.9%		2	100.0%	2.5	100.0%
Juvenile Female	2	5.9%	2.5	4.7%		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	3	0.0%	10.3	19.3%		0	0.0%	0.0	0.0%
Pup Male	0	0.0%	0.0	0.0%		0	0.0%	0.0	0.0%
Pup Female	0	0.0%	0.0	0.0%		0	0.0%	0.0	0.0%
Pup Unknown Sex	0	0.0%	0.0	0.0%		0	0.0%	0.0	0.0%
Male Unknown Age	0	00%	0 0	0.0%		0	0.0%	0.0	0.0%
Female Unknown Age	0	00%	0.0	0.0%		0	0.0%	0.0	0.0%
Unknown Sex and Age	1	2.9%	3.4	6.4%		0	0.0%	0.0	0.0%
Total	34	100.0%	536	100.0%		2	100.0%	2.5	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		 H	IARBOF	R SEA	\L
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	Take
1992	161.7	66.2	226.6	1992	2.3	1.2	3.5
1993	161.7	66.2	226.6	1993	2.3	1.2	3.5
1994	147.0	26.4	173.4	1994	7.3	0.0	7.3
1995	63.6	6.3	59.9	1995	2.5	0.0	2.5

SOURCE Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the City of St Paul and Tribal Government of St. Paul, 1995

Table 48. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Egegik, 1995

CENSUS

Total Native Households
Surveyed Households
Sampling Fraction
Sample Household Members
Estimated Household Members
60.3

HARVEST AND USE INFORMATION

Gave Away 0.0%

0.0%

Estimated Community Harvest Percentage of Native Households: and Take (Expanded): Sea Harbor Sea Harbor <u>Lion</u> <u>Seal</u> Lion <u>Seal</u> used 0.0% 7.7% **Total Number Harvested** 1.4 0.0 Hunted 0.0% 3.0% **Total Number Struck and Lost** 0.0 0.0 Harvested 0.0% 3.8% Total Number Taken 0.0 1.4 Received 0.0% 3.8%

Number Harvested Per Capita 0.00

0.02

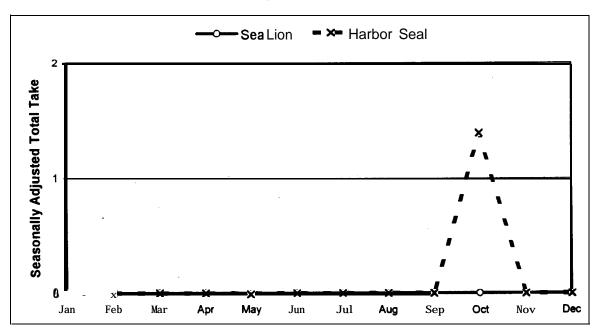
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jut	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR	VEST AND	TAKE B	Y SAMPL	ED HOUSE	HOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	, 0	0
ESTIMATED H	HARVEST	AND T	AKE BY	COMMUI	NITY (E	XPAND	ED)							
Harvest	0.0	0 0	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0
Struck & Lost	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	00	0.0	0.0
Total Take	0.0	0.0	0 0	0 0	0 0	00	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVES	T AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0 0	0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0 0	0.0	0 0	0 0	00	00	0 0	0 0	0.0	0.0	0.0	00		0.0
Total Take	0.0	0.0	0.0	00	00	00	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total lake (%)	***	_			_	-	•••		***					
Cum Take	0.0	0.0	0.0	0 0	0 0	00	0 0	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)	_								***					

HARBOR	SEAL H	ARVE Feb	EST BY Mar	MON [®] Apr	TH May	Jun	Jul	Aug	Sep	Oct	Nov	Ur Dec M	known o n t h	Total
REPORTED	HARVEST	AND	TAKE BY	•	LED HOU	SEHOL		EXPANDE						
Harvest	0	0	0	0	0	0	O	0	0	1	0	0	0	1
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (E	XPANE	DED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	1.4	0.0	0.0	0.0	14
Struck & Lost	0.0	0.0	0.0	0 0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0 0	0 0	00	0 0	0 0	0.0	0.0	1.4	0.0	0.0	0.0	14
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVI	EST AND	TAKE	ву сс	MMUNITY	(EXP	ANDED)				
Harvest	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	1.4	0.0	0.0		1.4
Struck & Lost	0.0	0.0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0 0	0.0	0 0	00	0 0	0 0	0.0	0.0	1.4	0.0	0.0		14
Total Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	0.0%	0.0%	100.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	0 0	0.0	0 0	0 0	0.0	0.0	1.4	1.4	1.4		
Cum. Take (%)	0.0%	0.0%	0.0%	00%	00%	00%	00%	0.0%	0.0%	100.0% 1	00.0%	100.0%		

SOURCE: Alaska Department of Fish and Came, Division of Subsistence Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Aksk with assistance from the Egegik Traditional Council, 1995.

//////////////////////////////////////	<i>5</i> 2,7	Sea	Lion			Harbo	r Seal	
	Reporte Samo	d by	Communit	y Est	Reporte	d by	Communi (Expan	•
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0	_	1	100.0%	1. 4	100.0%
Adult Female	0		0 0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0	-	0	0.0%	0.0	0.0%
Juvenile Male	0		0 0		0	0.0%	0.0	0.0%
Juvenile Female	0	***	0 0	***	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0	_	0	0.0%	0.0	0.0%
Pup Male	0		0 0		0	0. 0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0		0 0		0	0.0%	0.0	0.0%
Female Unknown Age	0	_	0 0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%
Total	0		0.0		1	100.0%	1. 4	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA I	LION		 <u> </u>	IARBOI	R SEA	<u>L</u>
		Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	3. 3	14. 3	17. 7
1993	0.0	0.0	0.0	1993	7.7	3. 3	11.0
1994	0.0	0.0	0.0	1994	12. 8	0.0	12.8
1995	0.0	0.0	0.0	1995	1.4	0.0	1.4

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seak in Alaska, with assistance from the Egegik Traditional Council, 1995.

CENSUS Total Native Households 26

Surveyed Households 26
Sampling Fraction 1090%

Sample Household Members 79 Estimated Household Members 79.0

HARVEST	ΔNID	USE	INFORMATION
IIANVLOI	AIVU	OOL	IIVI OINWATION

Percentage of Native Households: Estimated Community Hat-vest

S e a	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	Seal
Used 0.0%	34. 6%	Total Number Harvested	0.0	13. 0
Hunted 0.0%	19.2%	Total Number Struck and Lost	0.0	3.0
Harvested 0.0%	15.4%	Total Number Taken	0.0	16.0
Received 0.0%	23.1%			
Gave Away 0.0%	154%	Number Harvested Per Capita	0.00	0.16

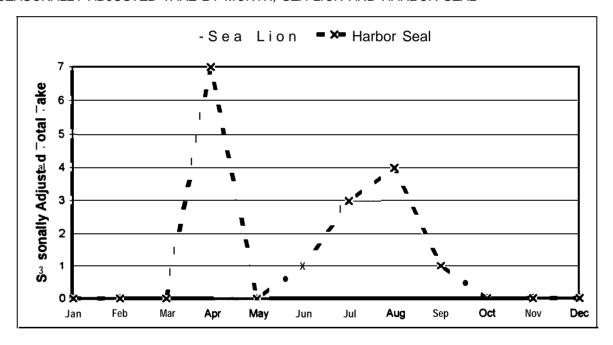
SEA LION	HARVE	ST BY	/ MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HAF	RVEST AND	TAKE B	Y SAMPL	ED HOUS	EHOLDS	(UNEXPAI	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	00	0.0
Total Take	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	00	0.0	0.0	0.0	0 0	0 0	0.0	0 0	0 0		0.0
Struck & Lost	0.0	0 0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0		00
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		•				•••	•••							
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take(%)				_		_	_	***						

HARBOR	SEAL H	ARVE	ST BY	MON7	Н							ι	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 1	Month	Total
REPORTED	HARVEST	AND	TAKE BY	SAMPL	ED HOU	SEHOLDS	S (UNI	EXPAND	ED)					
Harvest	0	0	0	7	0	0	1	4	1	0	0	0	0	13
Struck & Lost	0	0	0	0	0	1	2	0	0	0	0	0	0	3
Total Take	0	0	0	7	0	1	3	4	1	0	0	0	0	16
ESTIMATED	HARVEST	AND	TARE BY	COMM	UNITY (E	XPANDE	D)							
Harvest	0.0	0.0	0.0	70	0.0	0.0	1.0	4. 0	1.0	0.0	0.0	0.0	0.0	13.0
Struck & Lost	0 0	0.0	0.0	0.0	0.0	1.0	2. 0	0.0	0.0	0.0	0.0	0.0	0.0	3. 0
Total Take	0.0	0.0	0.0	7. 0	0.0	1.0	30	40	1.0	0.0	0.0	0.0	0.0	16.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE B	Y CO	MMUNIT	Y (EXPA	NDED)				
Harvest	0.0	0.0	0.0	7.0	0.0	0.0	1.0	4. 0	1.0	0.0	0.0	0.0		13.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0		3.0
Total Take	0.0	0.0	0.0	7.0	0.0	1 0	3. 0	4.0	1.0	0.0	0.0	0.0		160
Total Take (%)	0.0%	0.0%	0.0%	43.8%	0. 0%.	6. 3%	18.8%	25.0%	6. 3%	0.0%	0.0%.	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	70	7. 0	a.0	11.0	15.0	16.0	16.0	16.0	16.0		
Cum. Take (%)	0.0%	0.0%	0.0% 43	36% 43	. 6% 5 0.0	% 68.8%	93.6	6% 100	. 0% 100	. 0% 100	0.0% 1	00. 0%		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaska with assistance from the King Salmon Traditional Council, 1996.

		Sea	Lion		HarborSeal						
	Reporte	d by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.			
	Samp	ole	(Expan	ded)	Sam	ple	(Expar	ided)			
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0		0.0	•••	2	15.4%	2.0	15.4%			
Adult Female	0		0.0	•••	2	15.4%	2.0	15.4%			
Adult Unknown Sex	0	•••	0.0	•••	9	69.2%	9.0	69.2%			
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%			
Juvenile Female	0		0.0	_	0	0.0%	0.0	0.0%			
Juvenile Unknown Sex	0	***	0 0		0	0.0%	0.0	0.0%			
Pup Male	0		0.0		0	0.0%	0.0	0.0%			
Pup Female	0		0.0		0	0.0%	0.0	0.0%			
Pup Unknown Sex	0	•••	0.0	•••	0	0.0%	0.0	0.0%			
Male Unknown Age	0		0.0	-	0	0.0%	0.0	0.0%			
Female Unknown Age	0	***	0.0	•••	0	0.0%	0.0	0.0%			
Unknown Sex and Age	0		0.0	•••	0	0.0%	0.0	0.0%			
Total	0		0.0		13	100.0%	13.0	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u>-</u>	HARBOR SEAL					
		Struck/	Total				Struck/	Total		
<u>Year</u>	Harvest	Lost	<u>Take</u>		Year	<u>Harvest</u>	Lost	<u>Take</u>		
1992	0.0	0.0	0.0		1992	10.2	0.0	10.2		
1993	0.0	0.0	0.0		1993	21.3	10.7	32.0		
1994	0.0	0.0	0.0		1994	13.0	3.0	16.0		
1995	0.0	0.0	0.0		1995	13.0	3.0	16.0		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the King Salmon Traditional Council, 1995.

CENSUS Total Native Households 32
Surveyed Households 32
Sampling Fraction 100.0%

Sample Household Members 75
Estimated Household Members 75.0

HARVEST AND USE INFORMATION

Percentage of Native Households:

Sea Harbor
Lion Seal
used 0.0% 0.0%
Hunted 0.0% 0.0%

Estimated Community Harvest
and Take (Expanded):
Sea Harbor
Lion Seal
Total Number Harvested 0.0 0.0
Total Number Struck and Lost 0.0 0.0

 Hunted 0.0%
 0.0%
 Total Number Struck and Lost 0.0
 0.0
 0.0

 Harvested 0.0%
 0.0%
 Total Number Taken 0.0
 0.0

 Received 0.0%
 0.0%
 Number Harvested Per Capita 0.00
 0.00

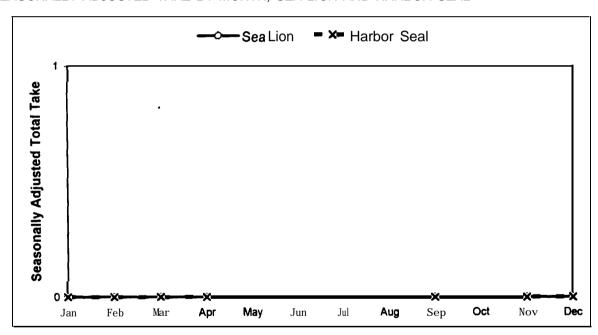
SEA LION HARVEST BY MONTH Uiiknown May Jun Jul Aug Sep Oct Nov Dec Month Total Jan Feb Mar Apr REPORTED HARVEST AND TAKE BY SAMPLED HOUSEHOLDS (UNEXPANDED) 0 Harvest 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Struck & Lost 0 0 0 0 0′ 0 0 0 0 0 Total Take 0 0 0 0 0 0 0 ' 0 0 0 0 0 0 0 ESTIMATED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest 0.0 0.0 0.0 00 0.0 00 00 00 0.0 0.0 0.0 0.0 0.0 00 Struck & Lost 0.0 00 0.0 00 00 00 00 0.0 00 0 0 0.0 0.0 0.0 0.0 Total Take 0.0 00 00 00 00 00 00 00 00 00 0.0 00 0.0 0.0 ESTIMATED SEASONALLY ADJUSTED HARVEST AND TAKE BY COMMUNITY (EXPANDED) Harvest 0.0 0.0 0.0 00 0.0 00 00 00 00 0 0 0.0 0.0 0.0 Struck & Lost 00 0.0 0.0 00 00 00 00 00 0.0 00 0.0 00 00 Total Take 0.0 0.0 0.0 0.0 00 00 00 00 00 0.0 0.0 0.0 0.0 Total Take (%) Cum. Take 0.0 0.0 0.0 0.0 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Cum Take (%)

HARBOR SEAL HARVEST BY MONTH Unknown														
_	Jan	Feb	Mar	Apr	May	Jun	Jut	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPL	ED HOU	ISEHOLI	DS (UNE	XPANDI	ED)					
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (I	EXPAND	ED)							
Harvest	0.0	0 0	0.0	0 0	0 0	00	0 0	00	0 0	0.0	00	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0 0	00	0 0	0.0	0.0	00	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0 0	00	00	0 0	0.0	00	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	JUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0.0		0.0
Struck & Lost	0 0	0.0	0.0	0 0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0 0	0 0	00	0.0	0.0	0.0	0.0		00
Total Take (%)					•••	***				-				
Cum. Take	0.0	0.0	0.0	0.0	0.0	0 0	00	0 0	0.0	0.0	0.0	0.0		
Cum. Ta	ake(%)			-				_						

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Levelock Traditional Council, 1995

		Sea	Lion			Harbo	Harbor Seal		
	Reported	d by	Communi	ty Est.	Reporte	d by	Communi	ty Est.	
	Samp	ole	(Expan	ded)	Samp	ole	(Expan	ded)	
	Number	Number %		%	Number	%	Number	%	
Adult Male	0		0.0	•••	0	-	0.0		
Adult Female	0		0.0	-	0		0.0	-	
Adult Unknown Sex	0		0.0	•••	0	_	0.0		
Juvenile Male	0		0.0	***	0		0.0		
Juvenile Female	0		0.0	***	0		0.0		
Juvenile Unknown Sex	0	***	0.0	-	0		0.0		
Pup Male	0		00		0		0.0		
Pup Female	0		0.0		0		0.0		
Pup Unknown Sex	0		0.0		0		0.0	-	
Male Unknown Age	0		0.0		0	***	0.0		
Female Unknown Age	0		00		0		0.0		
Unknown Sex and Age	0		0.0		0		0.0		
Total	0		0.0		0		0.0		

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			Н	IARBOF	R SEA	L	
		Struck/	Total				Struck/ Total		
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Y</u>	ear	<u>Harvest</u>	Lost	<u>Take</u>	
1992	0.0	0.0	0.0	19	992	10.8	0.0	10.8	
1993	0.0	0.0	0.0	19	993	2. 7	5. 4	8. 1	
1994	0.0	0.0	0.0	19	994	0.0	0.0	0.0	
1995	0.0	0.0	0.0	19	995	0.0	0.0	0.0	

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Levelock Traditional Council, 1995

Table 51. SEA LION AND HARBOR SEAL HARVEST AND TAKE ESTIMATES: Naknek, 1995

SAMPLING DES	SIGN:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	15	72	87	
	Surveyed Households	15	26	41	
	Sampling Fraction	100.0%	36.1%	47.1%	
	Sample Household Members	53	70	123	
	Estimated Household Members	53.0	193.8	246.8	

HARVEST AND USE INFORMATION

Percentage of Native Househo	o <i>lds:</i> Harbor	Estimated Community Harvest and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>	, , ,	Lion	Seal
used 0.0%	56.3%	Total Number Harvested	0.0	34.8
Hunted 0.0%	167%	Total Number Struck and Lost	0.0	15.3
Harvested 0.0%	144%	Total Number Taken	0.0	50.2
Received 0.0%	431%			
Gave Away 0.0%	29.2%	Number Harvested Per Capita	0.00	0.14

SEA LION HARVEST BY MONTH Unknown														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HA	RVEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							ļ
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	00	0.0	00	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0.0	0 0	0.0	0.0	0.0	00	00	0.0
Total Take	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0.0	00	0.0	0 0	0.0	0.0	0.0	0 0	0.0	0.0		0.0
Struck & Last	0.0	0.0	0.0	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0		0.0
Total Take(%)	***	***		***		_	***				•••	_		
Cum Take	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	00	0.0	0.0	0.0		
Cum Take(%)	***	_					_	_	_					

HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aua	Sep	Oct	Nw	Dec N	lonth	Total
REPORTED	HARVEST	AND	TAKE BY	SAMP	LED HO	USEHOI	DS (UN	IEXPANI	DED)					
Harvest	0	0	0	2	2	2	1	12	5	2	0	0	0	26
Struck & Lost	0	0	0	2	1	0	0	4	3	0	0	0	0	10
Total Take	0	0	0	4	3	2	1	16	8	2	0	0	0	36
ESTIMATED	HARVEST	AND	TAKE BY	COMM	IUNITY (EXPAN	DED)							
Harvest	0.0	0.0	0.0	20	2.0	2.0	1.0	17.3	8.5	2.0	0.0	0.0	0.0	34.8
Struck & Lost	0.0	0.0	0.0	20	10	0 0	0 0	5.0	6.5	0 0	0.0	0.0	0.0	15.3
Total Take	0.0	0 0	0.0	4.0	30	20	1.0	23.1	15.1	2.0	0.0	0.0	0.0	50.2
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AND	TAKE	BY CO	OMMUNIT	ГҮ (ЕХР	ANDED)				
Harvest	0.0	0.0	0.0	20	20	20	1.0	17.3	0.5	2.0	0.0	00		34.8
Struck & Lost	0.0	0.0	0.0	20	1.0	0.0	00	5.8	6.5	0.0	0.0	0.0		15.3
Total Take	0 0	0.0	0.0	4 0	3.0	20	10	231	15.1	2.0	0.0	0.0		50.2
Total Take (%)	0.0%	0.0%	0.0%	8.0%	6.0%	4.0%	2.0%	46.0%	30.1%	4.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	4 0	7.0	9.0	10.0	33.1	48.2	50.2	50.2	50.2,		
Cum. Take (%)	0.0%	0.0%	0.0%	8.0%	14.0%	17.9%	19.9%	66.0%	96.0%	100.0%	100.0%	100.0%		

SOURCE. Alaska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Naknek Traditional Council, 1995

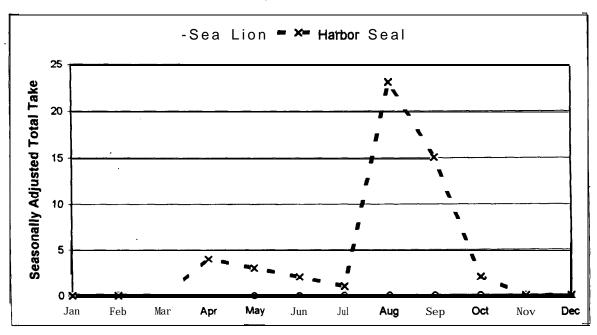
Con Lion

HARVEST BY AGE AND SEX

		Sea	Lion			Harbo	Harbor Seal		
	Reporte	d by	Communi	ty Est	Report	ed by	Commun	ity Est.	
	Samp	le	(Expan	ded)	Sam	ple	(Expar	nded)	
	Number	Number %		%	Number	%	Number	%	
Adult Male	0		0.0		3	11.5%	3.0	a.696	
Adult Female	0	•••	0.0	_	1	3.8%	1.0	2.9%	
Adult Unknown Sex	0	•••	0.0	•	18	69.2%	26.0	77.0%	
Juvenile Male	0		0.0	-	0	0.0%	0.0	0.0%	
Juvenile Female	0		0.0	•••	0	0.0%	0.0	0.0%	
Juvenile Unknown Sex	0		0.0		1	3.8%	1.0	2.9%	
Pup Male	0		00	***	0	0.0%	0.0	0.0%	
Pup Female	0		0.0	•••	0	0.0%	0.0	0.0%	
Pup Unknown Sex	0	***	0.0		2	7.7%	2.0	5.7%	
Male Unknown Age	0		00	•••	0	0.0%	0.0	0.0%	
Female Unknown Age	0		0.0		0	0.0%	0.0	0.0%	
Unknown Sex and Age	0	<u></u>	0.0		1	3.8%	1.0	2.9%	
Total	0		0.0	***	26	100.0%	34.8	100.0%	

Harbar Coal

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			HARBOR SEAL				
		Struck/	Total				Struck/	Total	
<u>Year</u>	Harvest	Lost	Take	<u>Yea</u>	<u> 16</u>	<u>Harvest</u>	Lost	<u>Take</u>	
1992	0.0	0.0	0.0	199	92	26.6	7.0	33.6	
1993	0.0	0.0	0.0	199	93	2.7	0.0	2.7	
1994	0.0	0.0	0.0	199	94	21. 4	6.3	29.7	
1995	0.0	0.0	0.0	199	95	34. 8	15. 3	so. 2	

SOURCE: Alaska Department of Fish and Game, Division of Subsistence Study and Monitor System for Sea Lilins and Harbor Seals in Alaska, with assistance from the Naknek Traditional Council, 1995.

CENSUS Total Native Households 27

Surveyed Households 25 Sampling Fraction 92.6%

Sample Household Members 85 Estimated Household Members 91.8

HARVESTAND	LISE	INFORMATION	
TAK VESTAND	USE	INFURINATION	

Percentage of Native Households: Estimated Community Harvest

Sea	Harbor	arbor and Take (Expanded):						
<u>Lion</u>	<u>Seal</u>		Lion	Seal				
used 0.0%	0.0%	Total Number Harvested	0.0	0.0				
Hunted 0.0%	0.0%	Total Number Struck and Lost	0.0	0.0				
Harvested 0.0%	0.0%	Total Number Taken	0.0	0.0				
Received 0.0%	0.0%							
Gave Away 0.0%	0.0%	Number Harvested Per Capita	0.00	0.00				

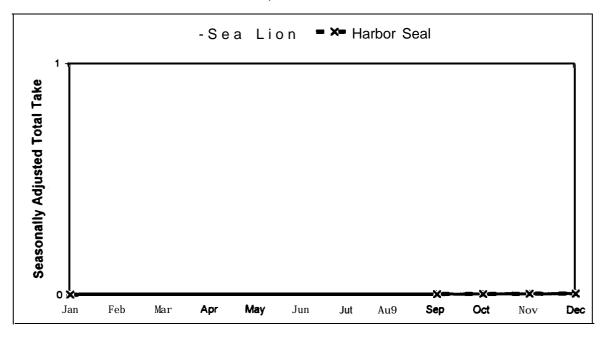
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	lonth	Total
REPORTED HA	ARVEST ANI	D TAKE	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPAI	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	00	0 0	0.0	0.0	0 0	0.0	0.0	0.0	00	0.0	0.0
Total Take	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)			•••	***					-	***	-			
Cum Take	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)		•••		***		***		_		_	_			
		·					·	<u>"</u>	·	·	<u>"</u>		·	<u>'</u>

HARBOR :	HARBOR SEAL HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aty	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND :	TAKE BY	SAMPL	ED HOU	SEHOL	DS (UNE	EXPANDE))					
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMMI	JNITY (E	XPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)		_		-			_			_				
Cum. Take	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Ta	ake(%)	•	<u></u> .					·		_				

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Pilot Point Traditional Council, 1995

		Sea	a Lion		Harbor Seal						
	Reporte	d by	Community	/ Est.	Reporte	d by	Community Est.				
	Sample		(Expande	ed)	Samp	le	(Expanded)				
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0		0.0		0	-	0.0				
Adult Female	0		0.0		0		0.0				
Adult Unknown Sex	0		0.0		0		0.0				
Juvenile Male	0		0.0		0	***	0.0				
Juvenile Female	0	***	0.0		0	-	0.0				
Juvenile Unknown Sex	0		0.0		0		0.0				
Pup Male	0		0.0		0	•••	0.0				
Pup Female	0		0.0	•••	0	***	0.0				
Pup Unknown Sex	0	•••	0.0		0		0.0				
Male Unknown Age	0		0.0	•••	0		0.0	_			
Female Unknown Age	0		0.0		0		0.0				
Unknown Sex and Age	0		0.0	•••	0		0.0	_			
Total	0	•	0.0		0		0.0				

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

		SEA	LION			HARBOR SEAL						
,	Struck/ Total							Struck/	Total			
	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Yea</u>	<u>ar</u>	<u>Harvest</u>	Lost	Take			
	1992	0.0	0.0	0.0	199	92	5. 4	4. 3	9.7			
	1993	0.0	0.0	0.0	199	93	2. 2	0.0	2. 2			
	1994	0.0	0.0	0.0	199	94	3. 1	0.0	3. 1			
	1995	0.0	0.0	0.0	199	95	0.0	0.0	0. 0			

SOURCE. Alaska Department of Fish and Game, **Division** of Subsistence, **Subsistence** Study and Monitor System for **Sea** Liis and Harbor Seals in **Alaska**, with assistance from the Pilot Point **Traditional** Council. 1995

CENSUS Total Native Households 33
Surveyed Households 33
Sampling Fraction 100.0%

Sample Household Members 108 Estimated Household Members 108.0

HARVESTAND USE INFORMATION

Percentage of Native Households: Estimated Community Harvest

Sea	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	Seal
Used 0.0%	87.9%	Total Number Harvested	0.0	17.0
Hunted 0.0%	48.5%	Total Number Struck and Lost	0.0	10.0
Harvested 0.0%	33.3%	Total Number Taken	0.0	27.0
Received 0.0%	60.6%			
Gave Away 0.0%	30.3%	Number Harvested Per Capita	0.00	0.16

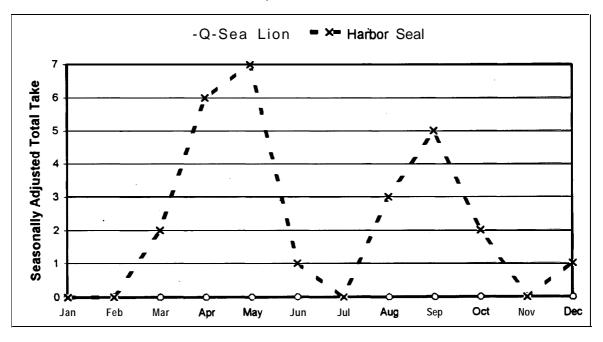
SEA LION	SEA LION HARVEST BY MONTH Unknown													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 1	Month	Total
REPORTED HAI	RVEST AND	TAKE B	Y SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0.0	0 0	0.0	0.0	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0 0	0.0	00	00	0 0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0 0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXPA	NDED)				
Harvest	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	.0.0	0.0	0.0	0.0		0.0
Total Take(%)					_	-		***	***	***				
Cum Take	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)						***		-			***			

HARBOR	HARBOR SEAL HARVEST BY MONTH Unknown													
_	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec I	<i>l</i> lonth	Total
REPORTED	${\sf HARVEST}$	AND	TAKE BY	SAMPL	ED HOU	JSEHOL	DS (UN	IEXPAN	DED)					
Harvest	0	0	1	4	5	1	0	2	2	2	0	0	0	l?
Struck & Los!	0	0	1	2	2	0	0	1	3	0	0	1	0	10
Total Take	0	0	2	6	7	1	0	3	5	2	0	1	0	27
ESTIMATED	HARVEST	AND	TAKE BY	СОММ	UNITY (EXPAND	DED)							
Harvest	0.0	0.0	1.0	4.0	50	1.0	0.0	2.0	2.0	2.0	0.0	0.0	0.0	17.0
Struck & Lost	0 0	0.0	10	20	20	0 0	0 0	1.0	3.0	0.0	0.0	1.0	0.0	10.0
Total Take	0.0	0.0	2.0	60	7.0	1.0	0 0	3.0	5.0	2.0	0.0	1.0	0 0	27.0
ESTIMATED	SEASONA	LLY A	ADJUSTED	HARVE	ST AND	TAKE	ву со	OMMUNI	TY (EXP	ANDED)				
Harvest	0.0	0.0	1.0	4.0	5.0	10	00	20	2.0	2.0	0 0	0.0		170
Struck & Lost	0.0	0.0	1.0	2.0	2.0	0.0	0.0	1.0	3.0	0.0	0.0	1.0		10.0
Total Take	0.0	0.0	2.0	6.0	7.0	1.0	0.0	3.0	5.0	2.0	0.0	1.0		27.0
Total Take (%)	0.0%	0.0%	7.4% 2	2.2% 2 5	. 9 %	3.7%	0.0%	11.1%	18.5%	7.4%	0.0%	3.7%		100.0%
Cum. Take	0.0	0.0	2.0	8.0	15.0	16.0	160	19.0	24.0	26.0	26.0	27.0		
Cum. Take (%)	0.0%	0.0%	7.4%	29.6%	55.6%	59.3%	593%	70.4%	88.9%	96.3%	96.3%	100.0%		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaski a, with assistance from the Port Heiden Traditiinal Council, 1995.

		Sea	Lion		Harbor Seal						
	Reported	d by	Communi	ty Est	Reporte	ed by	Community Est				
	Sam	Samde		(Expanded)		ple	(Expanded)				
	Number	%	Number	%	Number	%	Number	%			
Adult Male	0		0.0	_	0	0.0%	0.0	0.0%			
Adult Female	0		0.0		0	0.0%	0.0	0.0%			
Adult Unknown Sex	0		00		11	64.7%	11.0	647%			
Juvenile Male	0	***	00	_	0	0.0%	0.0	0.0%			
Juvenile Female	0		00	•••	0	0.0%	0.0	0.0%			
Juvenile Unknown Sex	0	***	0.0	_	1	5.9%	1.0	5.9%			
Pup Male	0		00	•••	0	0.0%	0.0	0.0%			
Pup Female	0		00		0	0.0%	0.0	0.0%			
Pup Unknown Sex	0	***	00		0	0.0%	0.0	0.0%			
Male Unknown Age	0	•	00		0	0.0%	0.0	0.0%			
Female Unknown Age	0		00	•••	0	0.0%	0.0	0.0%			
Unknown Sex and Age	. 0		00		5	294%	5.0	29.4%			
Total	0		00		17	100.0%	170	100.0%			

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u></u>	HARBOR SEAL					
		Struck/	Total			Struck/	Total			
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	0.0	0.0	0.0	1992	40.5	36.0	76.5			
1993	0.0	0.0	0.0	1993	30.7	19.9	60.6			
1994	0.0	0.0	0.0	1994	63.0	46.3	106.3			
1995	0.0	0.0	0.0	1995	17.0	10.0	27.0			

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Port Heiden Traditional Council, 1995.

CENSUS Total Native Households 32 Surveyed Households 31

Sampling Fraction 96.9%
Sample Household Members 103
Estimated Household Members 106.3

HARVEST AND USE INFORMATION

Percentage of Native Househo	olds:	Estimated Community Harvest		
S e a	Harbor	and Take (Expanded):	Sea	Harbor
<u>Lion</u>	<u>Seal</u>		Lion	<u>Seal</u>
used 0.0%	35.5%	Total Number Harvested	0.0	2.1
Hunted 0.0%	22.6%	Total Number Struck and Lost	0.0	0.0
Harvested 0.0%	6.5%	Total Number Taken	0.0	2.1
Received 0.0%	32.3%			
Gave Away 0.0%	65%	Number Harvested Per Capita	0.00	0. 02

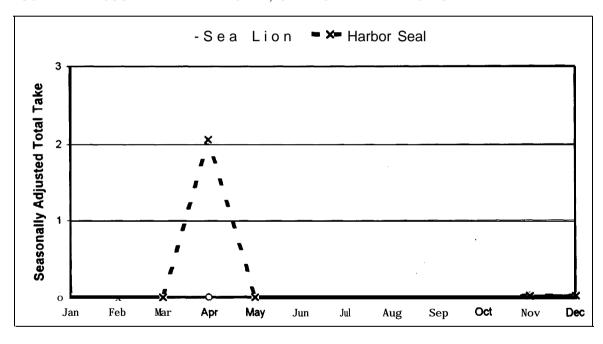
SEA LION	HARVE	ST B	Y MON	TH								Ur	known	
	Jan	Feb	Mar	Apr	May	Jun	Jut	Aug	Sep	Oct	Nw	Dec M	onth	Total
REF'ORTED HA	RVEST AND	TAKE E	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0 0	0.0	00	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0 0	0.0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0.0		0.0
Struck & Lost	0.0	0.0	0 0	00	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0 0	00	0 0	00	0 0	0.0	0 0	0.0	0.0	0.0		0.0
Total Take (%)						•••				***	***			
Cum Take	0 0	0.0	0.0	0 0	_ 0.0	00	0 0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)							-	•••						

HARBOR	SEAL H	ARVES	ST BY	MON7	Ή							Ur	ıknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPL	ED HO	USEHOL	DS (UN	EXPAND	ED)					
Harvest	0	0	0	1	0	0	0	0	0	0	0	0	1	2
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	1	0	0	0	0	0	0	0	0	1	2
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (EXPAND	DED)							
Harvest	0.0	0.0	0.0	1.0	0.0	00	0 0	0.0	0.0	0.0	0.0	0.0	1.0	2.1
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	1.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	1.0	2.1
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Y (EXPA	NDED)				
Harvest	0.0	0 0	0.0	21	0.0	00	0 0	0 0	0 0	0.0	0.0	0.0		2.1
Struck & Lest	0.0	0.0	0.0	0.0	00	00	0 0	0 0	0 0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	2.1	00	0.0	0 0	0 0	0.0	0.0	0.0	0.0		2.1
Total Take (%)	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	2.1	21	21	21	2.1	21	2.1	2.1	2.1		
Cum. Take (%)	0.0%	0.0%	0.0%	100.0%	100.0% 1	100.0% 10	00.0% 100		% 100.	0% 10	00.0%	100.0%		

SOURCE Alaska Department of Fish and Came, Division of Subsatence. Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the South Naknek Traditional Council. 1995

		Sea	Lion			Harbo	r Seal	
	Reporte	ed by	Commun	ity Est.	Reporte	ed by	Commun	ity Est.
	Samp	ole	(Expan	ded)	Sam	ple	(Expan	nded)
	Number	%	Number	%	Number	%	Number	%
Adult Male	0		0.0		0	0.0%	0.0	0.0%
Adult Female	0	_	0.0	***	1	500%	1.0	50.0%
Adult Unknown Sex	0		0.0	***	0	0.0%	0.0	0.0%
Juvenile Male	0	***	0.0		0	0.0%	0.0	0.0%
Juvenile Female	0		00		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0	***	0	0.0%	0.0	0.0%
Pup Male	0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0	***	0.0	•••	0	0.0%	0.0	0.0%
Male Unknown Age	0	•••	0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0	***	0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		1	50.0%	1.0	50.0%
Total	0	•••	0.0		2	100.0%	2.1	100.0%

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION AND HARBOR SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			H	IARBOI	R SEA	.L	
		Struck/	Total				Struck/	Total	
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>		<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	
1992	0.0	0.0	0.0		1992	2.3	6.9	9.2	
1993	0.0	0.0	0.0		1993	6.4	18. 0	24.4	
1994	0.0	0.0	0.0	•	1994	4.4	1.1	5.5	
1995	0.0	0.0	0.0		1995	2. 1	0.0	2. 1	

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence **Study** and **Monitor** System for Sea Liis and Harbor **Seals** in Alaska, with **assistance** from the South Naknek Traditional Council, **1995**

Table 55. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Aleknagik, 1995

	<u>Total</u>	
Total Native Households	45	
Surveyed Households	38	
Sampling Fraction	84.4%	
Sample Household Members	149	
Estimated Household Members	176.4	
	Surveyed Households Sampling Fraction Sample Household Members	Total Native Households 45 Surveyed Households 38 Sampling Fraction 84.4% Sample Household Members 149

HARVEST	ΛNID	LICE	INIEO DIAA	$TI \cap II$
HARVESI	AINII	$U \supset \Gamma$	INFURIVIA	וווווו

Percentage of Native H		olds: Harbor Seal and	Estimated Community Harvest and Take (Expanded):	sea l	Harbor s	potted
	<u>Lion</u>	Spotted Seal		Lion	Seal	Seal
used (0.0%	78.9%	Total Number Harvested	0.0	0.0	11.8
Hunted	0.0%	36.8%	Total Number Struck and Lost	0.0	0.0	13.0
Harvested	0.0%	132%	Total Number Taken	0.0	0.0	24. 9
Received	0.0%	73 7%				
Gave Away	0.0%	15.8%	Number Harvested Per Capita	0.00	0.00	0.07

SEA LION	HARVE	ST B	Y MON	TH								J	Inknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Au9	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAI	RVEST AND	TAKE	BY SAMPL	ED HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (I	EXPAND	DED)							
Harvest	0.0	0.0	0.0	00	0 0	0.0	00	0.0'	00	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	00	0 0	00	00	0.0	0.0	0.0	0.0	0 0
Total Take	0.0	00	0 0	00	0 0	0 0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY AI	DJUSTED	HARVE	ST AND	TAKE	BY COM	MUNITY	(EXP	ANDED)				
Harvest	0.0	00	0 0	0 0	0 0	0 0	0 0	00	00	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	00	00	00	00	0.0	00	0.0	0.0	00		0.0
Total Take	0.0	.00	0 0	0 0	0 0	0 0	0 0	0.0	00	00	0.0	0.0		0.0
Total Take(%)		-		***			***			***		_		
Cum Take	0.0	0.0	0 0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)			Non	***			•••							

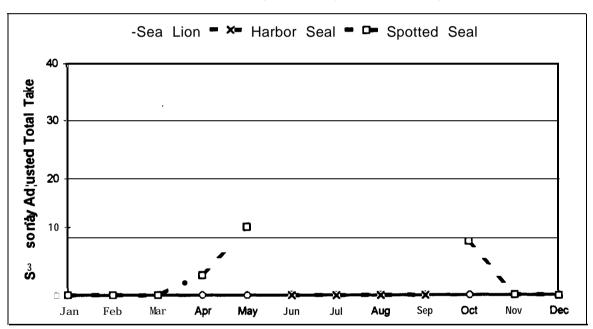
HARBOR	SEAL A	ND SI	POTTE	D SEA	AL HAI	RVEST	BY M	ONTH						
			otted Seal		j		Harbor	Seal	I		ted Seal		Unknown	
	J an	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND 1	AKE BY	SAMP	LED HO	OUSEHO	DS (UN	EXPAND	ED)					
Harvest	0	0	0	2	5	0	0	0	0	3	0	0	0	10
Struck & Lost	0	0	0	1	5	0	0	0	0	5	0	0	0	11
Total Take	0	0	0	3	10	0	0	0	0	a	0	0	0	21
ESTIMATED	HARVEST	AND	TAKE BY	COM	MUNITY	(EXPAN	DED)							
Harvest	0.0	0.0	0.0	2 4	5 9	0 0	0.0	0.0	0.0	3.6	00	0.0	0.0	11.8
Struck & Lost	0.0	0 0	0.0	12	5 9	00	0 0	0 0	0.0	5.9	0 0	0.0	0.0	13.0
Total Take	0.0	0.0	0 0	36	11.8	00	00	0.0	0.0	9. 5	0 0	0.0	0.0	24.9
ESTIMATED	SEASONA	LLY A	DJUSTED	HARV	EST AN	ID TAKE	ВУ СО	MMUNITY	Ү (ЕХР	ANDED)				
Harvest	0.0	0.0	0.0	2 4	5 9	0 0	0 0	0.0	0.0	3.6	0.0	0.0		11.8
Struck & Lost	0.0	0.0	0 0	12	5 9	0 0	0 0	0.0	0.0	5.9	0.0	0.0		13.0
Total Take	0.0	0.0	0 0	3 6	11.8	00	00	0.0	0.0	9. 5	0.0	0.0		24.9
Total Take (%)	0.0%	0.0%	0.0%	14.3%	476%	00%	0.0%	0.0%	0.0%	38 1%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	3.6	154	154	15.4	154	15.4	24.9	24 9	24.9		
Cum. Take (%)	0.0%	0.0%	0.0% 1	4. 3%	61. 9%	61 9%	61.9%	61.9% 6	1.9% 100	0. 0% 100	. 0% 10	00.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Aleknagik Tribal Council, 1995.

	Sea Lion			Harbo	rSeal		Spotted Seal					
	Reporte	d by	Commun	ity Est	Reporte	Reported by		Community Est.		Reported by		ity Est.
	Samp	le	(Expar	ided)	Samp	le′	(Expan	ded)	Samp	le'	(Expar	nded) ,
	Number	<u>%</u>	Number	<u>%</u>	Number 1	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>
Adult Male	0	***	0.0		0		0.0		1	10.0%	1.2	10.0%
Adult Female	0	•••	0.0		0		0.0	_	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	•	0.0	_	0	_	0.0		2	20.0%	2. 4	20.0%
Juvenile Male	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Juvenile Female	0		0.0		0		0.0		1	10.0%	1.2	10.0%
Juvenile Unknown Sex	0	_	0.0		0		0.0		0	0.0%	0.0	0.0%
Pup Male	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0 0		0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0	-	0.0	•••	0		0.0		0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0		0	-	0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	_	0.0		0		0.0		6	60.0%	7. 1	60.0%
Total	0		0.0		0		0.0		10	100.0%	11.8	100.0%

[·] Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		<u>_</u>	<u>IARBOF</u>	R SEA	<u>.L</u>	s	POTTE	DSE/	<u>\L</u>
		Struck/	Total			Struck/	Total			Struck/	Total
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>
1992	0.0	0.0	0.0	1992	0.0	3. 6	3. 6	1992	26. 6	5. 5	34. 1
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0	1993	4.8	0.0	4. 8
1994	0.0	0.0	0.0	1994	0.0	3. 3	3. 3	1994	21.5	0.0	21. 5
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	1995	11.8	13.0	24.9
	1992 1993 1994	Year Harvest 1992 0.0 1993 0.0 1994 0.0	Year Harvest Lost 1992 0.0 0.0 1993 0.0 0.0 1994 0.0 0.0	1992 0.0 0.0 0.0 1993 0.0 0.0 0.0 1994 0.0 0.0 0.0	Struck/ Total Year Harvest Lost Take Year 1992 0.0 0.0 0.0 1992 1993 0.0 0.0 0.0 1993 1994 0.0 0.0 0.0 1994	Struck/ Total Year Harvest Lost Take Year Harvest 1992 0.0 0.0 0.0 1992 0.0 1993 0.0 0.0 0.0 1993 0.0 1994 0.0 0.0 0.0 1994 0.0	Year Harvest Lost Take Year Harvest Lost Lost 1992 0.0 0.0 0.0 1992 0.0 3.6 1993 0.0 0.0 0.0 1993 0.0 0.0 1994 0.0 0.0 0.0 1994 0.0 3.3	Year Harvest Lost Take Year Harvest Lost Take 1992 0.0 0.0 0.0 1992 0.0 3.6 3.6 1993 0.0 0.0 0.0 1993 0.0 0.0 0.0 1994 0.0 0.0 0.0 1994 0.0 3.3 3.3	Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year 1992 0.0 0.0 0.0 1992 0.0 3.6 3.6 1992 1993 0.0 0.0 0.0 1993 0.0 0.0 0.0 1993 1994 0.0 0.0 0.0 3.3 3.3 1994	Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest 1992 0.0 0.0 0.0 1992 0.0 3.6 3.6 1992 26.6 1993 0.0 0.0 0.0 0.0 0.0 1993 4.8 1994 0.0 0.0 0.0 3.3 3.3 1994 21.5	Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost 1992 0.0 0.0 0.0 1992 0.0 3.6 3.6 1992 26.6 5.5 1993 0.0 0.0 0.0 0.0 0.0 1993 4.8 0.0 1994 0.0 0.0 3.3 3.3 1994 21.5 0.0

SOURCE, Alaska Department of Fish and Game, Diiisii of Subsistence, Subsistence Study and Monitor System for Sea Liis and **Harbor** Seals in **Alaska**, with assistance from the Aleknagik Tribal Council, **1995**.

Table 56. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 1995

	<u>Total</u>	
Total Native Households	14	
Surveyed Households	14	
Sampling Fraction	100.0%	
Sample Household Members	46	
Estimated Household Members	46.0	
	Surveyed Households Sampling Fraction Sample Household Members	Total Native Households 14 Surveyed Households 14 Sampling Fraction 100.0% Sample Household Members 46

HARVEST AND USE INFORMATION

Percentage of Native House			Estimated Community Harvest			
Se	sea Ha	rbor Seal and	and Take (Expanded):	sea	Harbor s	pottea
<u>Li</u>	<u>ion</u>	Spotted Seal		Lion	Seal	Seal
Used 0.0	0%	929%	Total Number Harvested	0.0	0.0	10.0
Hunted 0.	0.0%	64.3%	Total Number Struck and Lost	0.0	0.0	5. 0
Harvested 0.	.0%	60.0%	Total Number Taken	0.0	0.0	15.0
Received 0.	0.0%	78.6%				
Gave Away 0.	.0%	42.9%	Number Harvested Per Capita	0.00	0.00	0. 22

SEA LION	HARVE	STB	Y MONTI	4		•	•					Ų	Jnknown	
	Jan	Feb	Mar	Apr M	lay	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HA	RVEST AND	TAKE	BY SAMPLED	HOUSEHO	DLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED	HARVEST	AND 1	TAKE BY (COMMUNI	ΤY	(EXPAND	ED)							
Harvest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0	0.0
Total Take	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED H	IARVEST	ANI	D TAKE	BY COM	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0 0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take(%)									***		***			
Cum. Take	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)						***	***				_			

HARBOR	SEAL A	ND SF	OTTEL) SEA	L HAI	RVEST	BY MO	NTH						
			ted Seal				Harbor Se		Ī		ed Seal		Unknown	
	Jan	I-eb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nw	Dec	Month	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPL	ED HO	USEHOL	DS (UNE)	(PANDE	D)					
Harvest	0	0	a	2	0	0	0	0	0	0	0	0	0	10
Struck & Lost	0	0	4	1	0	0	0	0	0	0	0	0	0	5
Total Take	0	0	12	3	0	0	0	0	0	0	0	0	0	15
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY	(EXPAND	ED)							
Harvest	0.0	0.0	a. 0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Struck & Lost	0.0	0.0	4.0	1.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Total Take	0.0	0.0	12.0	3.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	15.0
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AN	D TAKE	ву сом	MUNITY	(EXPAN	IDED)				
Harvest	0.0	0.0	a. 0	2.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0		10.0
Struck & Lost	0.0	0.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		5.0
Total Take	0.0	0.0	12.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		15.0
Total Take (%)	0.0%	0.0%	80.0%	200%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	12.0	15.0	15.0	15.0	150	15.0	15.0	15.0	15.0	15.0		
Cum. Take (%)	0.0%	0.0%	80.0% 10	00.0% 10	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

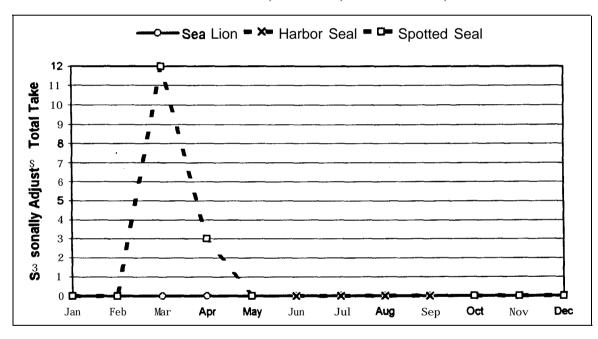
SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska with assistance from the Clark's Point Traditional Council, 1995.

Table 56. (cont.) SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Clark's Point, 199

	Sea Lion			Harbo	r Seal			spotte	edSeal			
	Reporte	d by	Communi ty	/ Est	Reported	d by	Communi t	y Est	Reporte	ed by	Communi ty	Est.
	Sampl	e	(Expand	led)	Samp	e'	(Expand	ted)	Sampl	e'	(Expan	ded)
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	₩	Number	<u>%</u>	Number	<u>%</u>
Adult Male	0		0.0	_	0		0.0		3	30.0%	3.0	30.0%
Adult Female	0		0.0	-	0		0.0		0	0.0%	0.0	0.0%
Adult Unknown Sex	0		0.0	_	0		0.0		0	0.0%	0.0	0.0%
Juvenile Male	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Juvenile Female	0	_	0.0		0		0.0		0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Pup Male	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Pup Female	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0		0.0		0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0		0		0.0	_	0	0.0%	0.0	0.0%
Female Unknown Age	0	_	0.0		0		0.0		0	0.0%	0.0	0.0%
Unknown Sex and Age	0	_	0.0	_	0		0.0		7	70.0%	7. 0	70.0%
Total	0	-	0.0		0	-	0.0		10	100.0%	10.0	100.0%

· Harvest in unknown months IS not included in the sample harvest, but is included in the community estimate column

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

						R SEA	<u>.L</u>		SPOTTED SEAL					
		Struck/	Total			Struck/	Total			Struck	/ Total			
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Losi	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	0.0	0.0	0.0	1992	0.0	0.0	0.0	1992	10.6	8. 5	19. 1			
1993	0.0	0.0	0.0	1993	0.0	0.0	0.0	1993	2.0	0.0	2. 0			
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0	199	21.5	0.0	21.5			
1995	0.0	0.0	0.0	1995	0.0	0.0	0.0	199	5 10.0	5. 0	15. 0			
	1992 1993 1994	Year Harvest 1992 0.0 1993 0.0 1994 0.0	Year Harvest Lost 1992 0.0 0.0 1993 0.0 0.0 1994 0.0 0.0	Year Harvest Lost Take 1992 0.0 0.0 0.0 1993 0.0 0.0 0.0 1994 0.0 0.0 0.0	Struck/ Total Year Harvest Lost Take Year 1992 0.0 0.0 0.0 1992 1993 0.0 0.0 0.0 1993 1994 0.0 0.0 0.0 1994	Struck/ Total Year Harvest Losi Take Year Harvest 1992 0.0 0.0 0.0 1992 0.0 1993 0.0 0.0 0.0 1993 0.0 1994 0.0 0.0 0.0 1994 0.0	Struck/ Total Struck/ Year Harvest Lost Take Year Harvest Lost 1992 0.0 0.0 0.0 1992 0.0 0.0 1993 0.0 0.0 0.0 1993 0.0 0.0 1994 0.0 0.0 0.0 1994 0.0 0.0	Year Harvest Lost Take Year Harvest Lost Take 1992 0.0 0.0 0.0 1992 0.0 0.0 0.0 1993 0.0 0.0 0.0 1993 0.0 0.0 0.0 1994 0.0 0.0 0.0 1994 0.0 0.0 0.0	Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year 1992 0.0 0.0 0.0 1992 0.0 0.0 0.0 1992 1993 0.0 0.0 0.0 1993 0.0 0.0 0.0 1993 1994 0.0 0.0 0.0 0.0 0.0 0.0 1994	Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest 1992 0.0 0.0 0.0 1992 0.0 0.0 0.0 1992 10.6 1993 0.0 0.0 0.0 1993 0.0 0.0 1993 2.0 1994 0.0 0.0 0.0 0.0 1994 21.5	Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost Take Year Harvest Lost 1992 0.0 0.0 0.0 1992 10.6 8.5 1993 0.0 0.0 0.0 0.0 0.0 1993 2.0 0.0 1994 0.0 0.0 0.0 0.0 0.0 1994 21.5 0.0			

SOURCE: Alaska Department of Fish and Game, **Division** of **Subsistence**, **Subsistence** Study and Monitor System for Sea Liis and **Harbor Seals** in Alaska, with assatance from the **Clark's** Point **Traditional** Council, 19%.

Table 57. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Dillingham, 1995

SAMPLING DESIGN:		Active	<u>Other</u>	<u>Total</u>	
TWO-S TRATA	Total Native Households	31	412	443	
	Surveyed Households	29	31	60	
	Sampling Fraction	93.5%	7.5%	13.5%	
Sa	mple Household Members	٠ 117	101	218	
Estin	nated Household Members	125.1	1342.3	1467.4	

	_		
HARVESTAND	USE	INFORMATION	1

	•					
Percentage of Native Ho	ouseho	olds:	Estimated Community Harvest			
	Sea H	arbor Seal and	and Take (Expanded):	Sea	Harbor s	potted
	<u>Lion</u>	Spotted Seal	, , ,	Lion	<u>Seal</u>	<u>Seal</u>
used	0.5%	59.6%	Total Number Harvested	0.0	13.3	7.5
Hunted	0.0%	5.7%	Total Number Struck and Lost	0.0	0.0	7.5
Harvested	0.0%	4.2%	Total Number Taken	0.0	13.3	15.0
Received	0.5%	58.6%				
Gave Away	0.0%	10.4%	Number Harvested Per Capita	0.00	0.01	0.01

SEA LION	SEA LION HARVEST BY MONTH Unknown Line Falls Mark Mark Mark Line Ind. Aug. San. Oct. Nov. Doc. Month. Tatal													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED HAR	VEST AND	TAKE B	Y SAMPLE	D HOUS	EHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTI MATED	HARVES	ΓAND	TAKE BY	COM	JUNITY	(EXPAND	DED)							
Harvest	0.0	0.0	0.0	0 0	0 0	0 0	0 0	do	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	00	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	00	00	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED S	SEASONA	LLY AD	JUSTED	HARVE	ST AN	D TAKE	BY CO	MMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	00	0 0	0 0	0 0	0.0	0.0	00	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)					-	-		***			***			
Cum. Take	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum. Take (%)						****								

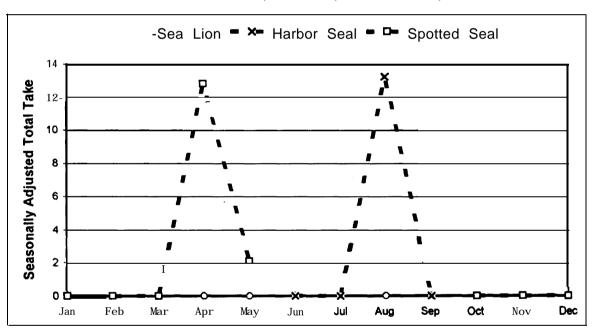
HARBOR			otted Seal				Harbor S			Sno	tted Seal		Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month	Total
REPORTED	HARVEST	AND 1	TAKE BY	SAMPL	ED HOU	SEHOL	DS (UNE	XPANDI	ED)					
Harvest	0	0	0	5	2	0	0	1	0	0	0	0	0	8
Struck & Lost	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Total Take	0	0	0	12	2	0	0	1	0	0	0	0	0	15
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (E	XPANI	DED)							
Harvest	0.0	0.0	0.0	5 3	21	0 0	0 0	13.3	0.0	0.0	0.0	0.0	0.0	20.8
Struck & Lost	0.0	0.0	0.0	7.5	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Total Take	0.0	0.0	0.0	12.8	2 1	0 0	0.0	13.3	0.0	0.0	0.0	0.0	0.0	28.3
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	IMUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	53	21	0 0	0.0	13.3	0.0	0.0	0.0	0.0		20.8
Struck & Lost	0.0	0.0	0.0	7.5	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0		7.5
Total Take	0.0	0.0	0.0	12.8	2.1	0.0	0.0	13.3	0.0	0.0	0.0	0.0		28.3
Total Take (%)	0.0%	0.0%	0.0%	454%	7.6%	00%	0.0%	47.0%	0.0%	0.0%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	12.8	15.0	15.0	15.0	28.3	28.3	28.3	20.3	28.3		
Cum. Take (%)	0.0%	0.0%	0.0%	454	% 53.0%	53.0%	53.0% 100	0.0% 1 (0.09	6 100.0	% 100.0%	100.09	6	

SOURCE, Alaska Department of Fish and Same, Division of Subsistence, Subsistence Study and Monitor System for Sea Lii and Harbor Seats in Alaska, with assistance from the Dillingham Traditional Council, 1995

	Sea Lion Reported by Community Est.				Harbo	r Seal			spotte	d Seal		
	Reporte	d by	Communi	ty Est.	Report	ed by	Commun	ity Est.	Reporte	ed by	Communi	ty Est.
	Samp	le	(Expan	ded)	Sam	ole′	(Expar	ided)	Samp	ole′	(Expan	ded)
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>
Adult Male	0	***	0.0	-	0	0 0%	0.0	0.0%	1	14.3%	1.1	14.3%
Adult Female	0		0.0		0	0.096	0.0	0.0%	0	0.0%	0.0	0.096
Adult Unknown Sex	0	•	0.0	•••	0	0.0%	0.0	0.0%	2	28.6%	2. 1	28. 6%
Juvenile Male	0	_	0.0	_	1	100.0%	13.3	100.0%	0	0.0%	0.0	0.0%
Juvenile Female	0		00		0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	2	28. 6%	2. 1	28.6%
Pup Male	0		0.0	_	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0		0.0	_	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0	•••	0	0.0%	0.0	0.0%	2	28. 6%	2. 1	28. 6%
Female Unknown Age	0		0.0	_	0	0.096	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0	_	0.0		0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Total	0	-	0.0	***	1	100.0%	13. 3	100.0%	7	100.0%	7. 5	100.0%

[•] Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		H	IARBO	R SEA	<u>L</u>	S	SPOTTED SEAL					
		Struck/	Total			Struck/	Total			Struck/	Total			
<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	Harvest	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>			
1992	0.0	0.0	0.0	1992	29.2	3. 0	32. 9	1992	49.6	3. 6	53. 3			
1993	0.0	0.0	0.0	1993	18. 0	4. 2	22. 2	1993	26. 1	0. 0	26. 1			
1994	0.0	0.0	0.0	1994	16. 2	0.0	16. 2	1994	35. 2	3. 0	38. 2			
1995	0.0	0.0	0.0	1995	13. 3	0.0	13. 3	1995	7. 5	7. 5	15. 0			

SOURCE: Abska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Dillingham Traditional Council, 1995.

SAMPLING DES	IGN:	<u>Active</u>	<u>Other</u>	<u>Total</u>	
TWO-STRATA	Total Native Households	27	40	67	
	Surveyed Households	27	23	50	
	Sampling Fraction	100.0%	57.5%	74.6%	
	Sample Household Members	145	104	249	
	Estimated Household Members	145.0	180. 9	325. 9	

HARVEST AND USE INFORMATION

Percentage of Native Ho	ouseho	olds:	Estimated Community Harvest			
	Sea F	larbor Seal and	and Take (Expanded):	sea	Harbor s	potted
	L <u>ion</u>	Spotted Seal		<u>Lion</u>	<u>Seal</u>	<u>Seal</u>
u s e d	0.0%	81.1%	Total Number Harvested	0.0	9.3	22. 9
Hunted	0.0%	305%	Total Number Struck and Lost	0.0	2.4	3.6
Harvested	0.0%	27.5%	Total Number Taken	0.0	11.7	26.5
Received	0.0%	72.5%				
Gave Away	0.0%	24.2%	Number Harvested Per Capita	0.00	0.03	0.07

SEA LION	HARVE	ST BY	MON	TH								Un	known	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec M	onth	Total
REPORTED HAR	VEST AND	TAKE BY	/ SAMPL	ED HOUS	SEHOLDS	(UNEXPA	NDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESTIMATED H	IARVEST	AND TA	KE BY	COMM	UNITY (EXPAND	ED)							
Harvest	0.0	00	0.0	0 0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	00	0 0	0 0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	00	00	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESTIMATED S	SEASONA	LLY AD.	JUSTED	HARVE	ST AND	TAKE	BY CO	MUNITY	(EXPA	NDED)				
Harvest	0.0	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0 0	0 0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0.0	0 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Take (%)						***								
Cum. Take	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0		
Cum Take (%)			•••	•••	***				-		•••			

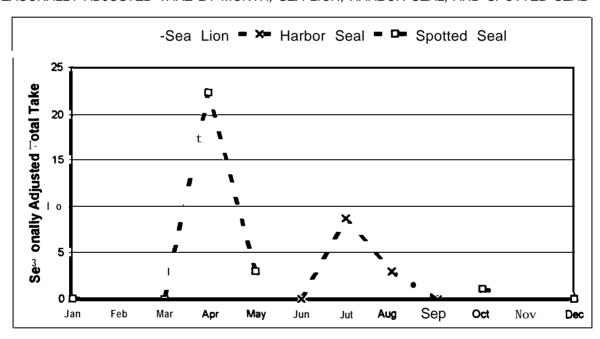
HARBOR	SEAL A	AND SP	OTTE	D SEA	L HAR	VEST	BY M	ONTH						-
	į		ed Seal				Harbor				tted Seal		Unknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	LJec.	Month_	Total
REPORTED	HARVES	T AND TA	KE BY	SAMPL	ED HOU	SEHOL	DS (UN	EXPAND	ED)					
Harvest	0	0	0	12	2	0	5	2	0	1	0	0	2	24
Struck & Lost	0	0	0	3	0	0	2	0	0	0	0	0	1	6
Total Take	0	0	0	15	2	0	7	2	0	1	0	0	3	30
ESTIMATED	HARVES	T AND TA	AKE BY	/ СОММ	UNITY (I	EXPAND	ED)							
Harvest	0.0	0.0	0.0	17.2	2.7	0 0	57	2.7	0.0	1.0	00	0.0	2.7	32.1
Struck & Lost	0.0	0.0	0.0	3.0	0 0	0.0	20	0 0	0.0	0.0	0.0	0.0	1.0	6.0
Total Take	0.0	0.0	0.0	26.2	27	00	77	2.7	0.0	1.0	0.0	0.0	3.7	36.1
ESTIMATED	SEASON	ALLY AD.	JUSTED	HARVE	ST AND	TAKE	ву со	TINUMM	Y (EXPA	(NDED)				
Harvest	0.0	0.0	0.0	18.8	30	00	6.3	3 0	0.0	11	0.0	0.0		32.1
Struck & Lost	0.0	0.0	0.0	3.6	0 0	0.0	2 4	0 0	0.0	0.0	0.0	0.0		6.0
Total Take	0.0	0.0	0.0	224	3.0	0.0	87	3.0	0.0	1.1	0.0	0.0		36.1
Total Take (%)	0.0%	0.0%	0.0%	58.7%	7.9%	0.0%	22.7%	7.9%	0.0%	2.9%	0.0%	0.0%		100.0%
Cum. Take	0.0	0.0	0.0	22.4	25.4	25.4	34.0	37. 0	37. 0	36. 1	38.1	38. 1		
Cum. lake (%)	0.0%	0.0% 0.0%	58.7%	66. 5%	66. 5%	69. 3	% 97.	1% 97.	1% 10	0.0% 10	0. 0% 10	0.0%		

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Liis and Harbor Seals in Alaska, with assistance from the Manokotak Traditional Council, 1995

	Sea Lion Reported by Community Est.					Harbo	r Seal			spotte	d Seal	
	Reported	d by	Commur	nity Est.	Reporte	ed by	Commu	nity Est.	Reporte	ed by	Commun	ity Est.
	Samp	le	(Expan	ded)	Samp	ole"	(Expar	ided)	Sam	ple"	(Expar	ided)
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	%
Adult Male	0		0.0		3	42.9%	4.3	44.0%	1	6.7%	1.4	6.4%
Adult Female	0		0.0		3	42.9%	3.7	30.2%	0	0.0%	0.0	0.0%
Adult Unknown Sex	0	***	0.0		0	0.0%	0.0	0.0%	5	33.3%	6.5	290%
Juvenile Male	0		0.0		0	0.0%	0.0	0.0%	1	6.7%	1.7	7.8%
Juvenile Female	0	0		_	1	14.3%	1.7	17.0%	0	0.0%	0.0	0.0%
Juvenile Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	3	20.0%	4.5	20.0%
Pup Male	0		0.0		0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Female	0		0.0	-	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Male Unknown Age	0		0.0	_	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0	_	0.0		0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%	5	33.3%	8.2	36.8%
Total	0		0.0		7	100.0%	9.8	100.0%	15	100.0%	22.3	100.0%

^{*} Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION		 HARBOR SEAL						SPOTTED SEAL				
		struck/	Total			Struck/	Total	_			Struck/	Total		
<u>Year</u>	Harvest	Lost	Take	Year	<u>Harvest</u>	Lost	<u>Take</u>		<u>Year</u>	<u>Harvest</u>	Lost	Take		
1992	3.9	0.0	3.9	1992	4.9	3.0	8.7		1992	25.1	1 .0	26.1		
1993	0.0	0.0	0.0	1993	3.2	0.0	3.2		1993	7.4	0.0	7.4		
1994	0.0	0.0	0.0	1994	0.0	0.0	0.0		1994	13.7	0.0	13.7		
1995	0.0	0.0	0.0	1995	9.3	2.4	11.7		1995	22.9	3.6	26.5		

SOURCE. Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Manokotak Traditional Council, 1995.

Table 59. SEA LION, SPOTTED SEAL, AND HARBOR SEAL HARVEST: Togiak, 1995

SAMPLING DES	IGN:	<u>Active</u>	<u>Other</u>	Total	
TWO-STRATA	Total Native Households	62	56	118	
	Surveyed Households	56	51	107	
	Sampling Fraction	90.3%	91.1%	90.7%	
	Sample Household Members	` 249	199	448	
	Estimated Household Members	275.7	218.5	494.2	

HARVESTAND USE INFORMATION

Percentage of Native Ho	useh	olds:	Estimated Community Harvest			
	Sea	Harbor Seal and	and Take (Expanded):	Sea	Harbor	Spotted
	<u>Lii</u>	Spotted Seal		Lion	Seal	Seal
used	0.9%	94 4%	Total Number Harvested	0.0	3.3	111.5
Hunted	0.0%	31.8%	Total Number Struck and Lost	0.0	0.0	4.4
Harvested	0.0%	290%	Total Number Taken	0.0	3.3	115.9
Received	0.9%	79.4%				
Gave Away	0.0%	29.9%	Number Harvested Per Capita	0.00	0.01	0.23

SEA LION	HARVE	STB	Y MON	TH								U	Jnknown	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 1	Month	Total
REPORTED H	arvest and	TAKE	BY SAMPL	ED HOUS	SEHOLDS	(UNEXPA	ANDED)							
Harvest	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Struck & Lost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Take	0	0	0	0	0	0	0	0′	0	0	0	0	0	. 0
ESTIMATED	HARVEST	AND	TAKE BY	COMM	UNITY (I	EXPAND	DED)							
Harvest	0.0	0.0	0.0	00	00	00	00	00	00	0. 0	0. 0	0.0	0.0	0.0
Struck & Lost	0.0	0.0	0.0	0.0	0 0	0.0	0.0	00	00	0.0	0.0	0.0	0.0	0.0
Total Take	0.0	0.0	0.0	0 0	0 0	0 0	00	00	00	00	0.0	0.0	0.0	0.0
ESTIMATED	SEASONA	LLY A	DJUSTED	HARVE	ST AND	TAKE	BY COM	MMUNITY	(EXP	ANDED)				
Harvest	0.0	0.0	0.0	0.0	0 0	00	00	00	00	0.0	0.0	0.0		0.0
Struck & Lost	0.0	0.0	0.0	0 0	0 0	0 0	00	0.0	00	0.0	0.0	0.0		0.0
Total Take	0.0	0.0	0 0	0.0	0 0	00	00	00	00	0.0	0.0	0.0		0.0
Total Take (%)			_	-	_		_							
Cum. Take	0.0	0.0	0.0	0 0	0 0	0 0	00	00	0.0	0.0	0.0	0.0		
Cum. Take(%)						-	_		•					

HARBOR	SEAL A	ND SF	POTTE	D SEA	L HAR	/EST	BY M	HTNC						
			tted Seal				Harbor				tted Sea		Unknown	
	Jan	teb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month_	Total
REPORTED	HARVEST	AND T	AKE BY	SAMPI	_ED HOU	SEHOLI	OS (UN	EXPAND	ED)					
Harvest	3	7	19	33	9	0	0	0	3	3	11	16	0	104
Struck & Lost	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Total Take	3	7	23	33	9	0	0	0	3	3	11	16	0	108
ESTIMATED	HARVEST	AND T	AKE BY	COMM	UNITY (E	XPAND	ED)							
Harvest	3.3	7.7	21.0	364	9.9	0 0	0 0	0 0	3.3	3.3	12.2	11.7	0.0	114.8
struck & Lost	0.0	0.0	4.4	0.0	0 0	00	0 0	0 0	0 0	0.0	0.0	0.0	0.0	4.4
Total Take	3.3	7.7	25.4	364	9.9	00	00	0 0	3 3	3.3	12.2	17.7	0.0	119.2
ESTIMATED	SEASONA	LLY AD	JUSTED	HARVE	ST AND	TAKE	ву со	MMUNIT	Y (EXPA	NDED)				
Harvest	3.3	7.7	21.0	364	99	0 0	0 0	0 0	3 3	3.3	12.2	17.7		114.8
Struck & Lost	0.0	0.0	4.4	0 0	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0		4.4
Total Take	3.3	7.7	254	364	9.9	0.0	0 0	0 0	3.3	3.3	12.2	177		119.2
Total Take (%)	2.8%	6.5%	21.3%	30.6%	83%	0.0%	00%	0.0%	2.8%	2.8%	102%	14.8%		100.0%
Cum. Take	3.3	11.1	364	72.9	82.8	82.8	628	828	86.1	89.4	101.5	119.2		
Cum. Take (%)	2.8%	9. 3%	30.6%	61.1%	69. 4%	694%	69.4%	694%	72. 2%	75.0%	85.2%	100.0%		

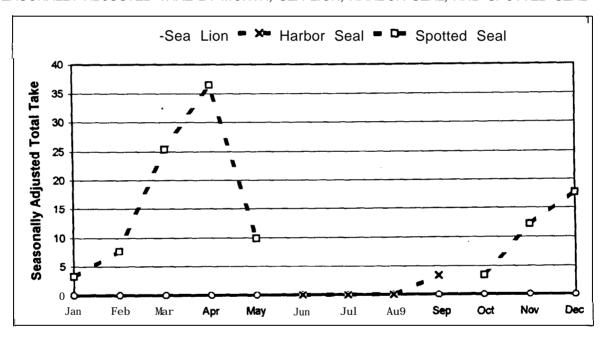
SOURCE: Ahska Department of Fish and Came, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seats in Alaska with assistance from the Togiak Traditional Council, 1995

HARVESTBYAGEANDSEX

		Sea Lion Reported by Community Est.				Harbo	r Seal			Spotte	d seal	
	Reported	by by	Communi	ty Est.	Reporte	ed by	Commun	ty Est.	Reporte	ed by	Communi	ity Est.
	Samp	le	(Expan	ded)	Samp	ole′	(Expan	ded)	Samp	ole′	(Expan	
	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>	Number	%
Adult Male	0	****	0.0		0	0.0%	0.0	0.0%	21	20.9%	23. 2	20.8%
Adult Female	0		0.0	•	0	0.0%	0.0	0.0%	10	9.9%	11.1	9.9%
Adult Unknown Sex	0		0.0		2	66. 7%	2. 2	66. 5%	19	18.9%	20.9	18.8%
Juvenile Male	0	****	0.0	_	1	33.3%	1.1	33.5%	11	10.9%	12.1	10.9%
Juvenile Female	0	0			0	0.0%	0.0	0.0%	8	7.9%	8.8	7.9%
Juvenile Unknown Sex	0	-	0.0	_	0	0.0%	0.0	0.0%	23	22.8%	25. 4	22. 8%
Pup Male	0	•	0.0	_	0	0.0%	0.0	0.0%	3	3.0%	3. 3	3. 0%
Pup Female	0		0.0	_	0	0.0%	0.0	0.0%	2	2. 096	2. 2	2. 0%
Pup Unknown Sex	0		0.0		0	0.0%	0.0	0.0%	3	3. 0%	3. 3	3. 0%
Male Unknown Age	0		0.0	_	0	0.0%	0.0	0.0%	0	0.0%	0.0	0.0%
Female Unknown Age	0		0.0		0	0.0%	00	0.0%	0	0.0%	0.0	0.0%
Unknown Sex and Age	0		0.0		0	0.0%	0.0	0.0%	1	1.0%	1.1	1.0%
Total	0		0.0		3	100.0%	3. 3	100.0%	101	100.0%	111.5	100.0%

[•] Harvest in unknown months is not included in the sample harvest, but is included in the community estimate column.

SEASONALLY ADJUSTED TAKE BY MONTH, SEA LION, HARBOR SEAL, AND SPOTTED SEAL



ESTIMATED COMMUNITY HARVEST, STRUCK AND LOST, AND TAKE BY YEAR

	SEA	LION			IARBOI	R SEA	۱ <u>L</u>	S	SPOTTED SEAL					
		Struck/	Total			Struck/	Total			Struck	k/ Totai			
Year	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	<u>Take</u>	<u>Year</u>	<u>Harvest</u>	Lost	Take			
1992	3.9	0.0	3.9	1992	24.3	2.0	26.3	1992	250.2	53.8	304.0			
1993	3.3	3.3	6.5	1993	24.9	15.0	40.7	1993	174. 7	49. 1	223. 8			
1994	1. 2	0.0	1. 2	1994	0.0	0. 0	0.0	1994	154. 2	39. 9	194. 1			
1995	0.0	0.0	0.0	1995	3. 3	0.0	3.3	1995	111.5	4.4	115. 9			

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Subsistence Study and Monitor System for Sea Lions and Harbor Seals in Alaska, with assistance from the Togiak Traditional Council, 1995.